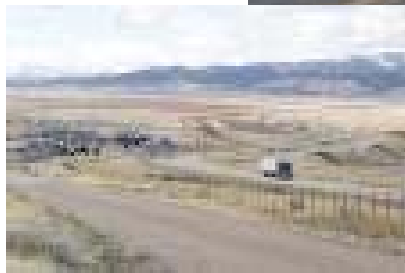
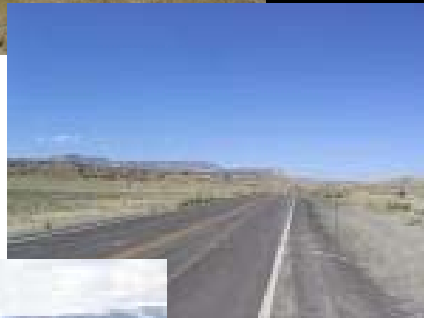


East Juab County

Community Transportation Plan



DRAFT REPORT
2005

Prepared By
UDOT Planning Section
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East Juab County

Community Transportation Plan

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* If available for this study

1. Introduction

1.1. Background

JUAB COUNTY

Area: 3,412 square miles; population: 5,817 (in 1990); county seat: Nephi; origin of county name: from the Ute word meaning flat or level plain; principal cities/towns: Nephi (3,515), Mona (584), Eureka (562), Levan (416); economy: agriculture, manufacturing, mining, recreation; points of interest: Historic Tintic Mining District, Little Sahara Recreation Area, Old Pony Express and Stage Route, Yuba Reservoir, Goshute Indian Reservation, Tintic Mining Museum in Eureka, Mount Nebo Wilderness Area, Fish Springs National Wildlife Refuge.

Juab County is a part of the Basin and Range physiographic province. Most of the fertile farming land in the county is located in the Juab Valley near Nephi at the base of Mount Nebo (11,877 feet). The western portion of the county consists of broad, semi-arid valleys and low desert mountains. The Wasatch Mountains are located to the east, and moving west there are the East Tintic Range, West Tintic Range, Thomas Range (Topaz Mountain 7,113 feet), Fish Springs Range, and the southern tip of the Deep Creek Range in the extreme northwest corner of the county.

Archaic and Fremont-Sevier cultural sites have been found in Juab County. Nephi Mounds north of Nephi is one of the most important Fremont agricultural sites in the eastern Great Basin. A portion of the Goshute Indian Reservation is located in the northwest corner of the county.

In 1776 the Dominguez-Escalante expedition crossed the county from north to south at the eastern end, passing near present Nephi. Jedediah Smith traversed the western end of the county in 1826 and via Fish Springs in 1827. In 1843-44 John C. Frémont journeyed through the county's eastern end en route north. Government explorers John W. Gunnison and J.H. Simpson traveled in the area in 1853 and 1859, respectively. Gunnison touched the extreme southeast portion of the county while Simpson pioneered the route later used by the Pony Express and the transcontinental telegraph.

In 1852 the legislative assembly created Juab County, which extended as a narrow strip to what was then the western boundary of Utah Territory (now the western boundary of Nevada). The western portion was removed in 1854 to form part of Summit County, Nevada, and several other changes in Juab's borders have been made over the years.

The first settlement in Juab Valley occurred in 1851 when a group of Mormon settlers arrived near Salt Creek, at present-day Nephi. Their economy was based primarily on agriculture.

From 1860 to 1863 Goshutes attacked an overland mail station at Willow Creek. As a result, the U.S. Army established a camp at Cedar Summit and a cantonment at Fish Springs in 1863.

In 1869 precious metals were discovered in the Tintic region, changing the economic and industrial destiny of Juab County. The towns of Diamond, Silver City, Mammoth, and especially Eureka became the main areas of the Tintic Mining District, which by 1899 was labeled one of the foremost mining districts in the country. From 1870 to 1899 Tintic produced approximately \$35,000,000 in mineral wealth. The metals in Tintic consisted of silver, gold, copper, lead, zinc, and some uranium at Topaz Mountain. Mining continued through the 1950s, and even today

some mining operations continue on a small scale. In recent years, several small manufacturing firms have helped to diversify Juab's economy.

Recreation at the White Sand Dunes, Little Sahara Recreation Area, has been very popular, attracting tourists and outdoor enthusiasts to the western portion of the county.

This information was provided from www.onlineutah.com, in an article written by Philip F. Notarianni.

NEPHI

Nephi is located at the mouth of Salt Creek Canyon; the north peak of Mount Nebo is to the northeast and the Red Cliffs are to the southeast. The city covers an area of approximately four square miles.

As with most settlements in Utah, Nephi's founders were Mormons, and the name of the town came from the Book of Mormon. In the summer of 1851 Joseph L. Haywood and Jesse W. Fox, the territorial surveyor, were instructed by church leaders to lay out the town of Salt Creek, so named for the local salty stream. Haywood served as civic and spiritual leader in the area for three years. The settlers immediately began to clear ground and build homes. They also started schools for their children. Nephi boasted the third high school (and the first rural one) in the state in 1894. In 1879 a Presbyterian school was opened and later a Methodist school.

Nephi was known for some years as Salt Creek. However, early church records refer to it as the Nephi Branch and some government records also called it Nephi. Until 22 May 1882 mail to the town was addressed to the Salt Creek post office. Nephi was incorporated in 1889, and on 16 January 1882 an act by the governor and the legislature of the territory was approved, making Nephi the county seat of Juab County.

Agriculture was the first industry. Farming and livestock have always been important in the Nephi area. The settlers traced the source of the salt in the creek to a cave in the canyon east of town and they then began to mine it. This soon became a flourishing local industry, with salt traded to people as far away as St. George in exchange for food and clothing. In 1893 the Nebo Salt Manufacturing Company was organized. However, it eventually became unprofitable to compete with the larger companies on the shores of the Great Salt Lake, and 1925 marked the end of the local industry.

Milling was another local industry with Zimra H. Baxter, George W. Bradley, and Abraham Boswell building a grist mill. Later more mills were built and modernized, and Nephi's Gem and Snowflake flour became known throughout most of Utah. In 1917 R.C. and Robert Winn built a mill which was later purchased by the Hermanson family. In June 1991 it was destroyed by fire with a loss of more than \$20,000 worth of inventory; however, the California partners who now own it are planning to rebuild.

Gypsum was found at the mouth of Salt Creek Canyon, plaster was made by grinding it between two rocks and cooking the powder. Later a grinding machine was obtained and a waterwheel installed which was powered by water diverted from Salt Creek. In 1889 the Nephi Plaster and Manufacturing Company was incorporated and the first mill was constructed. It survived two fires in the early 1900s and flourished to become the major employer in Nephi.

On 3 May 1879 the railroad came to Nephi, and in 1880 the Sanpete Valley Railroad was built from Wales to Nephi for the purpose of hauling coal from the mines. This helped make Nephi a business center and greatly improved the local economy.

The business district on Main Street grew rapidly, and during the late nineteenth century there were restaurants, mercantile stores, hotels, clothing stores, a tailor, a furniture store, two millinery stores, two barber shops, and several other establishments. At this time, because of the number of businesses, Nephi was frequently referred to as "Little Chicago."

Early in 1900 the main railroad line was moved west to Lynndyl and Delta. This resulted in some changes, but the people generally adjusted and other industries appeared to supplement the economy. In 1930 Nephi Poultry, Inc., which was affiliated with the Utah Poultry Association, was formed and employed a number of locals. The Nephi Processing Plant was organized in July 1945 to process turkey meat. In 1947 the Juab Valley Feed Company was organized; in 1958 it was purchased by Utah Poultry.

In June 1948 Termoid Western was dedicated and opened for inspection. The company manufactured rubber conveyor and transmission belting; molded types of industrial hose for oil fields, automotive fan belts, mechanical rubber products, and tank lining. By 1956-57 gross sales reached over six million dollars and it employed about 300 people. During the past thirty years the company has had multiple changes. It has closed and reopened, has changed owners several times, and is now operating as N.R.P.-Jones. It currently employs about 145 people.

Unfortunately, with the general ease and availability of transportation to larger urban areas, Nephi's Main Street business district has somewhat declined, as is the case with many rural areas in Utah. Nevertheless, Nephi's population reached its largest numbers in 1980, 3,285 residents, and continued to grow throughout the decade to 3,515 in 1990. Students attend the Nephi Elementary School and the Juab Middle and High School which share a building completed in 1980. The city hosts the annual Ute Stampede Rodeo, first held in 1936. The population is predominantly LDS with members attending seven wards in two stakes.

See: Keith N. Worthington, Sadi Greenhalgh, and Fred J. Chapman, *They Left a Record: A Comprehensive History of Nephi, Utah* (1979); and Alice P. McCune, *History of Juab County* (1947).

This information was provided from www.onlineutah.com, in an article written by Pearl D. Wilson.

MONA

Mona is on US-91 eight miles north of Nephi. The community was settled in 1852 with an early name of Clover Creek for the luxurious patches of wild clover growing in the area. The name was changed to Willow Creek, then Starr for an early settler. There is disagreement as to the origin of the name Mona, an Indian word meaning beautiful and a contraction of the Italian word "madonna." The name has a comical meaning. It means, "Manx, by the Mountains" whereby the word "Manx" refers to the people from the Isle of Mann. Dr. Matthew McCune, a former surgeon in the British Army, is reported to be the one who suggested Mona, because it was the name of his former home on the Isle of Mann.

This information was provided from www.onlineutah.com, in an article written by John W. Van Cott.

LEVAN

Levan (Juab) is on I-15 and U-28 eleven miles south of Nephi. There are several French, Latin, or Piute interpretations of the name, suggesting it means East of the Sunshine, Land of the Sunrise, Rear Rank of a Moving Army, Frontier Settlement, or Little Water. The tongue-in-cheekers say the name is a reverse spelling of Navel because it is located in the center of the state. Several different spellings have been recorded.

J This information was provided from www.onlineutah.com, in an article written by John W. Van Cott.

1.2. Study Need

Juab County has seen a 42% population increase within the last decade and just over 5% population increase the decade before. From 1960 to 2000, the population has increased 179 %. Juab County has shown a very consistent increase in population. A well-established transportation plan is needed to provide direction for continual maintenance and improvements to Juab County's transportation system.

The East Juab General Plan briefly describes the transportation needs of this area. With the aging infrastructure of the transportation system and the need for system improvements, a more extensive transportation plan is necessary for Delta City and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, & OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Juab County recognizes the importance of building and maintaining safe roadways, not only for the auto traffic but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a community transportation plan for East Juab County. This plan could be adopted by Juab County and Cities located along the Eastern half of the County as a companion document to their city's General Plan. With the community transportation plan in place the city can qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid community transportation plan to guide future developments and roadway expenditures. The plan includes two major components:

- Short-range action plan
- Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advance planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area includes Eastern Juab County. A general location map is shown in Figure 1-1. A more detailed map of the study area and city limits is shown in Figure 1-2. The study area was developed by Juab County and approved by the East Juab County Community Transportation Plan Technical Advisory Committee.

The roadway network within the study area includes I-15, US-6, SR-54, SR-28, and SR-132. Each of these roadways provides a vital function to Juab County and also to adjacent municipalities. These roadways along with the local road network are shown in Figure 2.

1.5. Study Process

The study, which began in May 2005, is proceeding as a cooperative effort between Juab County, Nephi City, Mona Town, Levan Town, UDOT, and local community members. It is being conducted under the guidance of Juab County Officials. The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee or “TAC” for this document.



Patrick Painter
Neil Cook
Val Jones
Paul McPherson
Wallace Barlow
Jim McWilliam
Mike Seely
Glenn Greenhalgh
Shirl Nichols
Craig Sperry
Bob Garrett
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State Representative
Juab County Commission Chair
Juab County Commissioner
Juab County Planning Commission
Juab County Planning Commission
Juab County Planning Commission
Juab County Administrator Assistant
Juab County Economic Development Director
Juab County Assessor
Juab County Recorder
Juab County Road Supervisor
Nephi City Council

**Robert Painter
Richard May
Randy McKnight
Ed Park
Paul Mangelsen
Corey Christensen
Harry Newell
Gordon Anderson
Jeff Banks
Golden Mangelsen
Irene Mangelsen
Troy Rindlisbucher
Derick Hooper
Kent Bateman
Myrna Trauntvein**

**Nephi City Council
Nephi City Planning Commission
Nephi City Manager
Nephi Road Supervisor
Levan Town Council
Levan Town Council
Mona Town Council
Mona Town Council
Extension Agent
Concerned Citizen
Concerned Citizen
Concerned Citizen
Concerned Citizen
Concerned Citizen
Press**

The study process for the East Juab County Community Transportation Plan consist of three basic parts: (1) inventory and analyze existing conditions, (2) project future conditions, and (3) development of a community transportation plan (CTP). This process involves the participation of the TAC for guidance, review, evaluation and recommendations in developing the CTP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's draft final report. The remainder of the draft final report will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the short-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

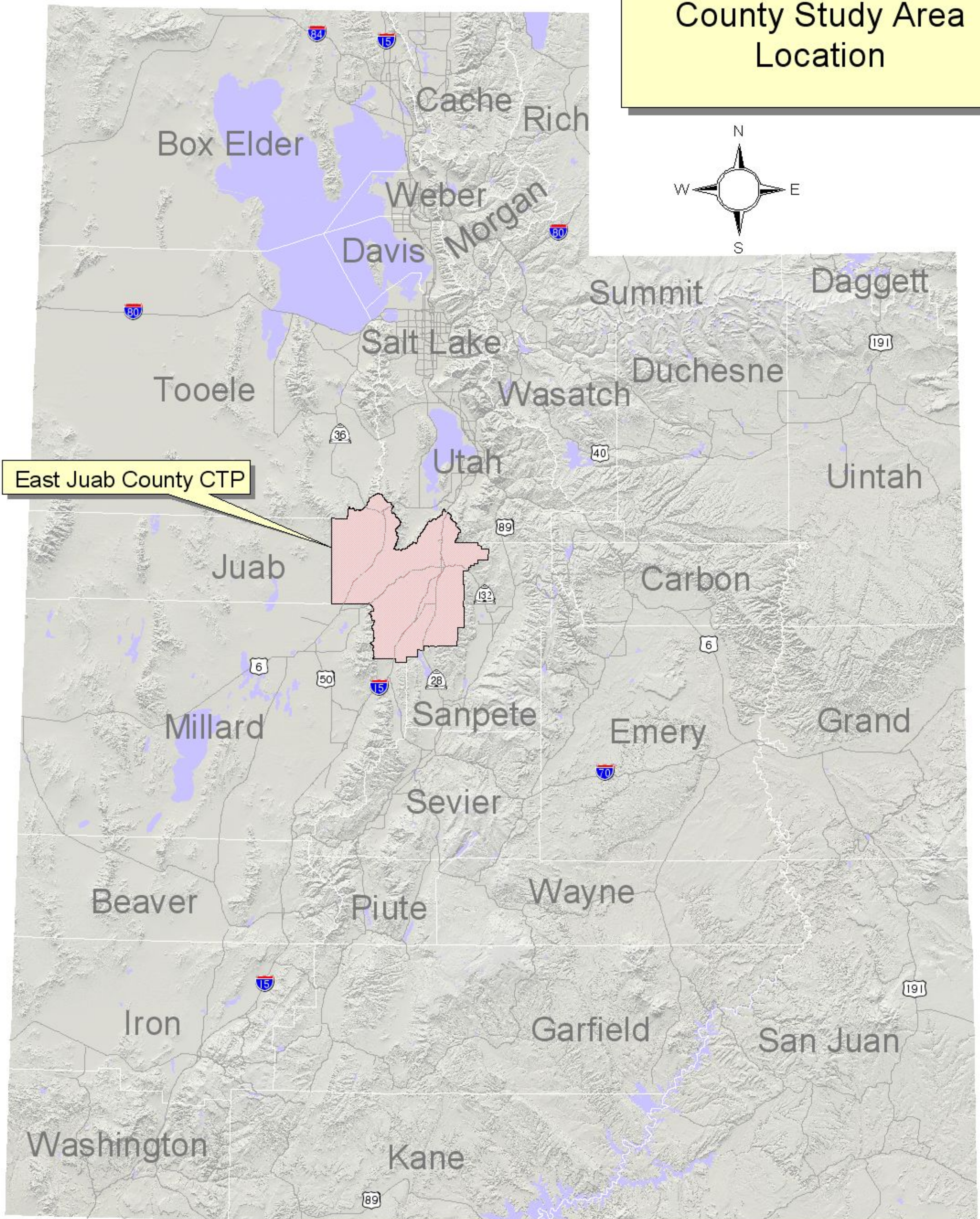
The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop will provide an inventory and analysis of existing conditions and identify needed transportation improvements. The second TAC workshop will focus on prioritizing projects, estimating costs, and discussion of the funding processes.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The draft final report and the final report will be submitted to the County for review and comments.

Upon local review of the draft report, UDOT will prepare appropriate changes and submit the final report to the County for approval. The final report will describe the study process, findings and conclusions, and will document the analysis of the recommended transportation system projects and improvements.

Figure 1-1: East Juab County Study Area Location



2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. Much of East Juab County is rural, but there are many issues dealing with commercial, mining and industrial properties, as well as residential. By analyzing the patterns or changes in land use, we can better predict the ever-changing transportation needs.

With the addition of Interstate 15 in the early 1980's, Nephi has experienced growth in the service industry from Main Street, but near the freeway interchanges. A proposed industrial park is starting to develop near Moroni Feed Road that may help industry in that area.

As lands fill in Utah County Northern Juab County is starting to see more residential growth. Juab County is providing affordable land for commuters into Utah and Salt Lake Counties.

The East Juab County Zoning map follows on the next page.

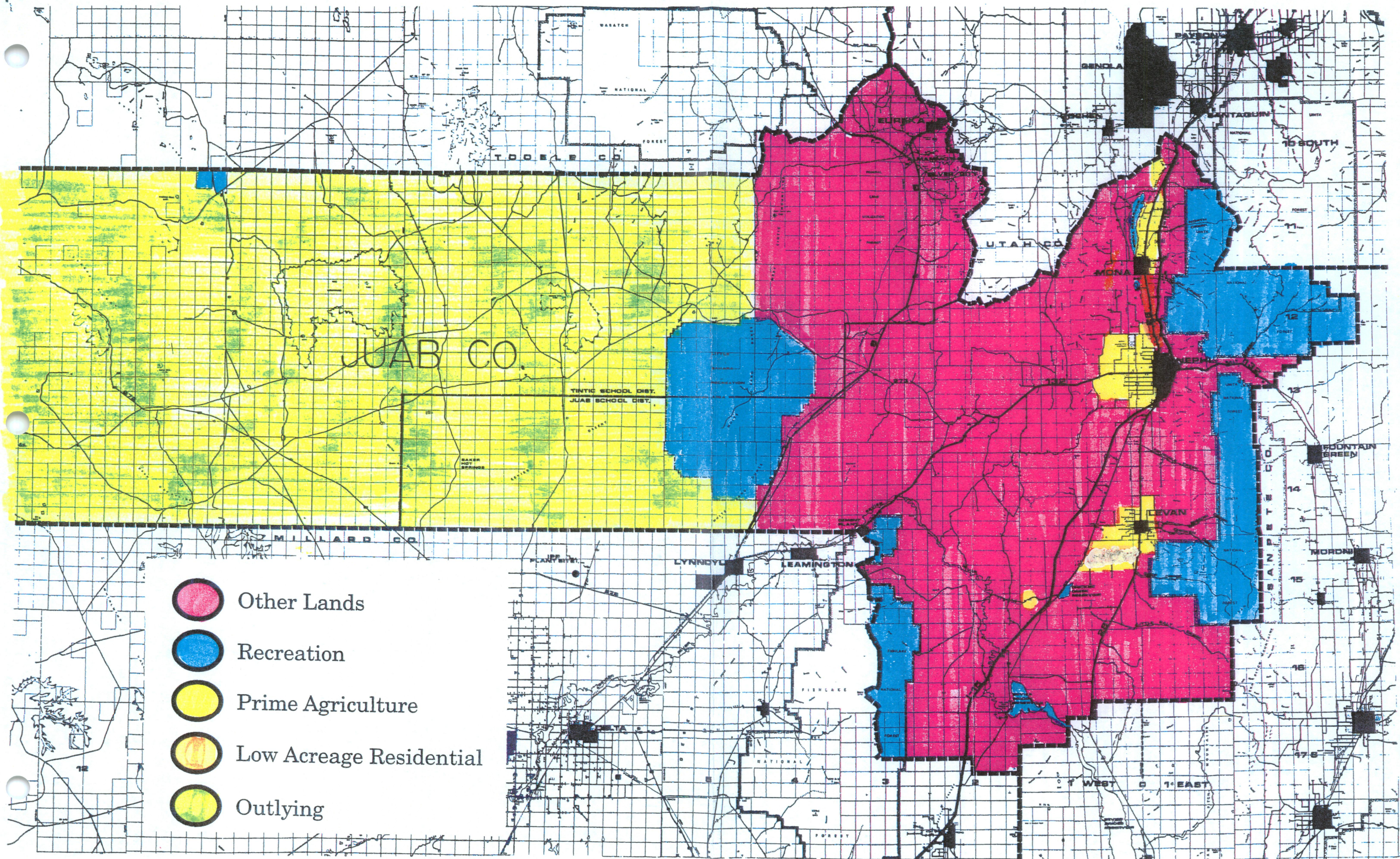
2.2. Environmental

In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Protecting the environment is a critical part of the transportation planning process.

2.3. Socio-Economic (Census Brief: Cities and Counties of Utah, May 2001)

Juab County ranks 21st for population in the State of Utah, with Nephi ranking 63rd out of 235 incorporated cities and towns. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Juab County and the city of Nephi. Chart 2-2 identifies that population change in Juab County has ranged from (-23.14)% between 1950 and 1960 to gaining 41.62% between 1990 and 2000, while growth in the State has gained between 18 and 38 percent during the past 50 years.



Nephi City Zoning Map

June 6, 2000 REVISION

- CC
- CU
- HC
- HC-2
- ID
- R1
- R1-8
- R2-8
- R1-H
- Animal

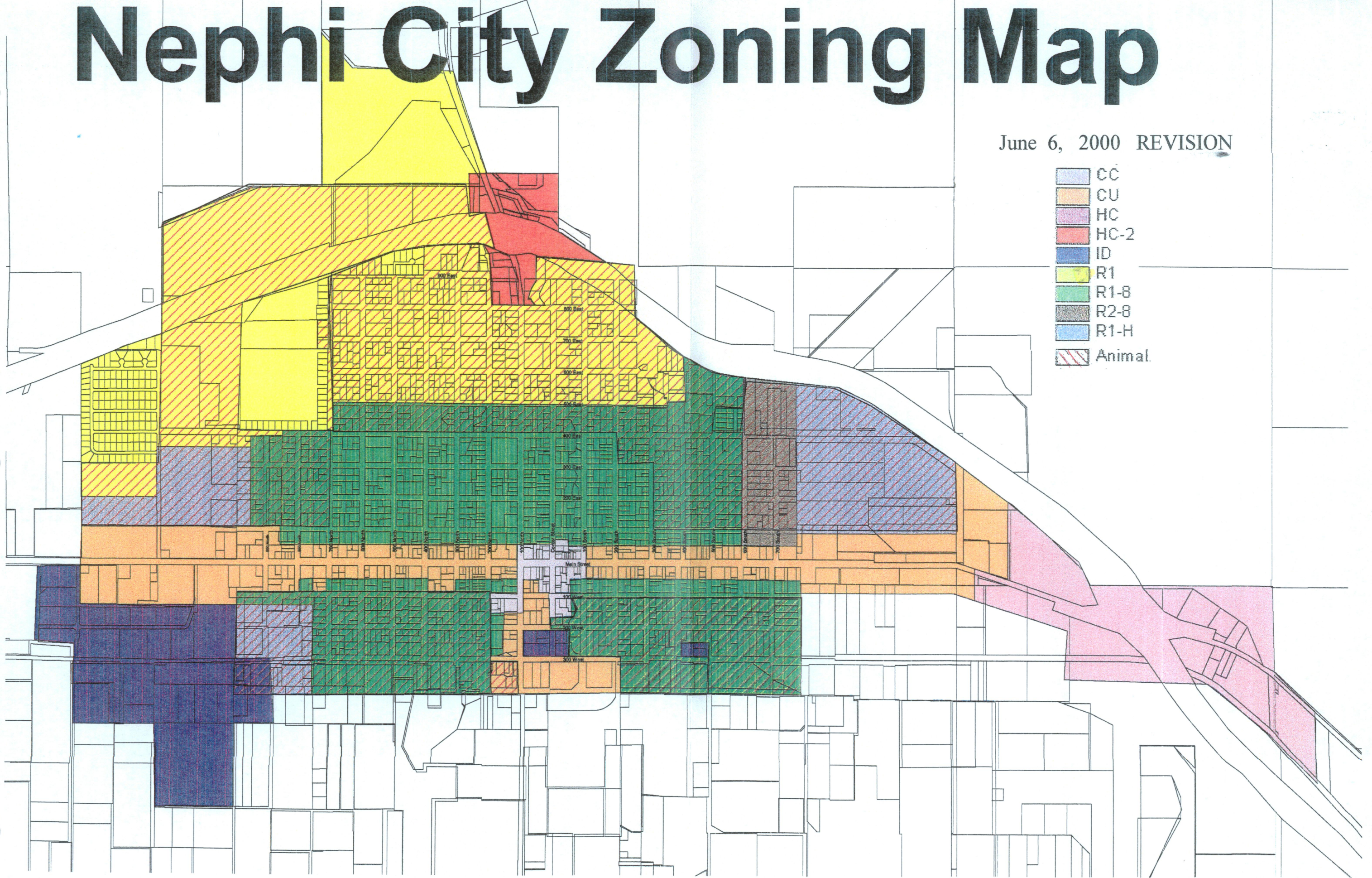
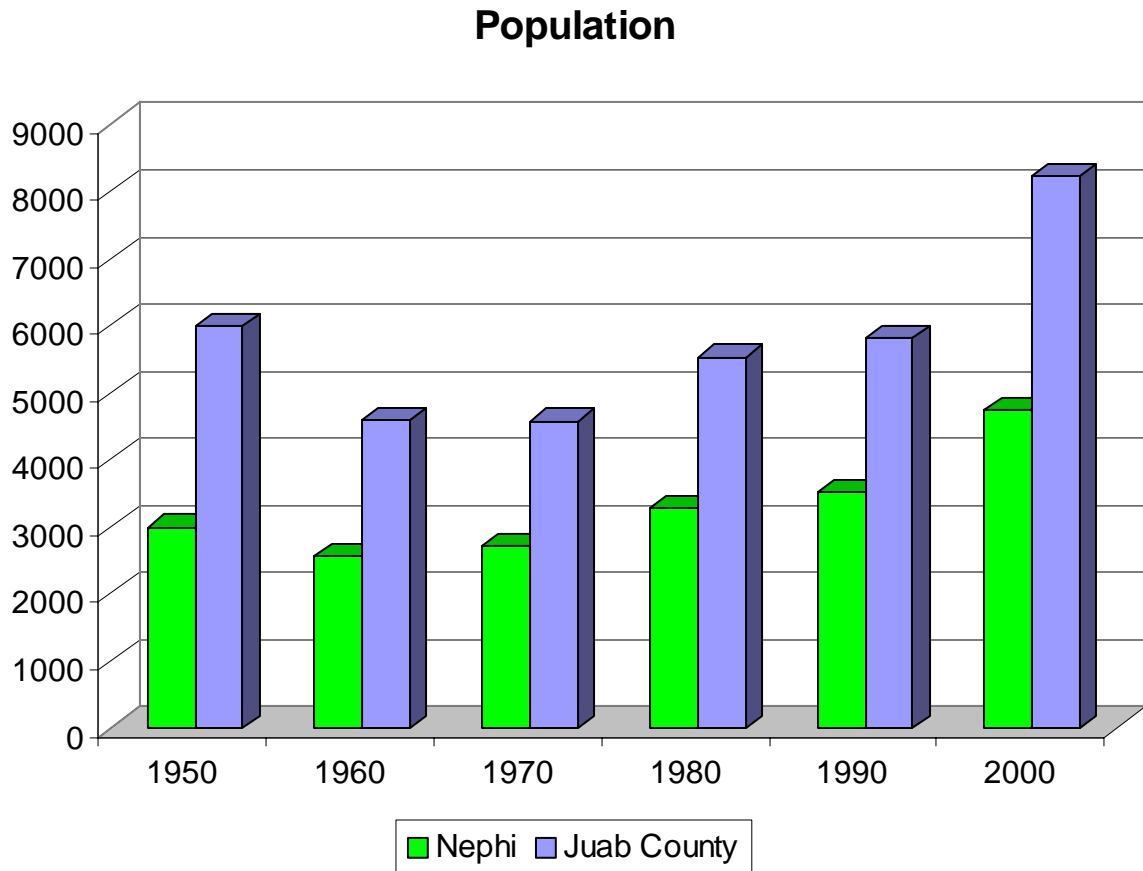


Chart 2-1. Population Data

Year	Population		
	Utah	Juab County	Nephi
1950	688,862	5,981	2,990
1960	890,627	4,597	2,566
1970	1,059,273	4,574	2,699
1980	1,461,037	5,530	3,285
1990	1,722,850	5,817	3,515
2000	2,233,169	8,238	4,733



Source: U.S. Bureau of the Census

<http://www.governor.utah.gov/dea/OtherPublications.html>

Chart 2-3 identifies yearly population growth rates for the State of Utah and Juab County.

As the State population has grown every decade from 1950 until 2000, Juab County has showed mixed growth periods in population over the same period.

Juab County has some unique demographic characteristics when compared with the State, particularly with age demographics. In the 25 to 54-age category, the State is at 38.6% the County is at 34.4%. For the 65+-age category, the State is at 8.5%, the County is at 12.3%. The State's median age is 27.1 years and the County's median age is 29.9 years. Another interesting statistic is that of Veteran status with State at 10.7%, Juab County at 11.8%.

The 2000 median household income in East Juab County is \$37,773, compared to the State median household income of \$45,726.

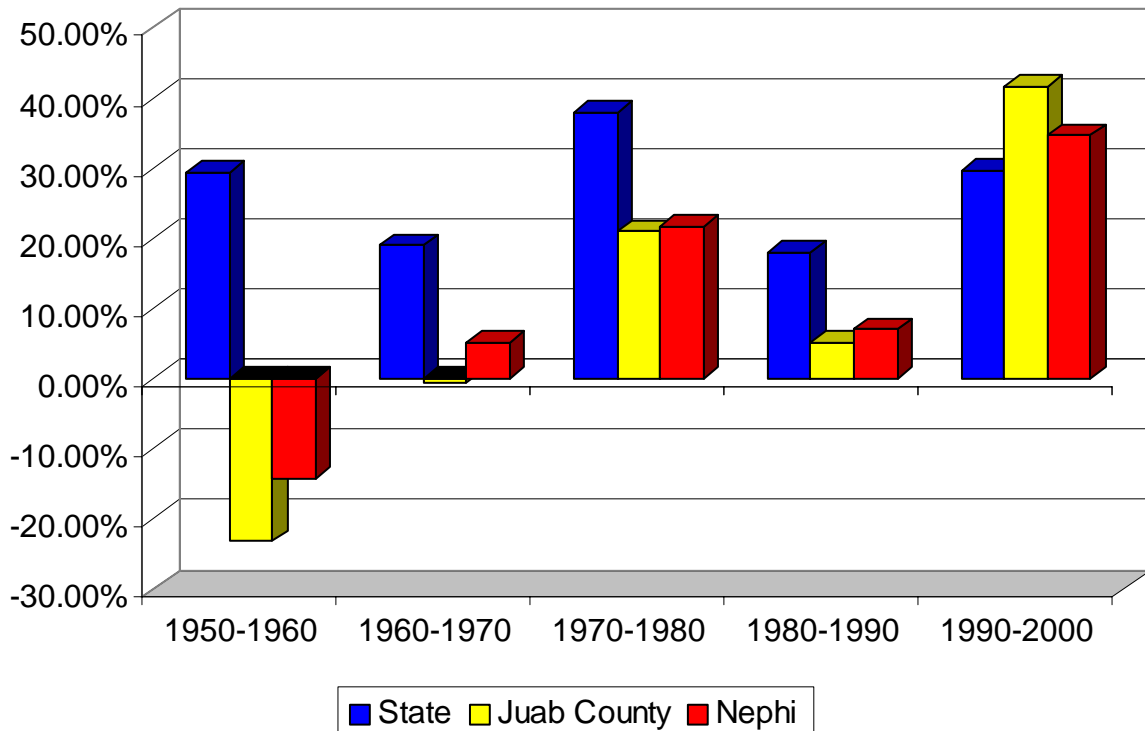
The unemployment rate in Juab County was 4.4 percent in 2000. According to the Utah Department of Employment Security (UDES), in 2000 there were approximately there are 5,179 employed people in Juab County or 57.6% percent of the population.

The majority of employees in Juab County work in three primary employment sectors: Government, Trade and Services as shown in Chart 2-5. In the county, these sectors make up 70.91% of the labor force. Another interesting note was that housing built from 1990-2000 were 10.2% of total for Juab County compared to 25% for the state. Also homes built before 1939 were 10.4% of the total for Juab County with 10% for the state.

Chart 2-2. Population Change Data

Decade	State of Utah	Juab County	Nephi
1950-1960	29.29%	-23.14%	-14.18%
1960-1970	18.94%	-0.50%	5.18%
1970-1980	37.93%	20.90%	21.71%
1980-1990	17.92%	5.19%	7.00%
1990-2000	29.62%	41.62%	34.65%

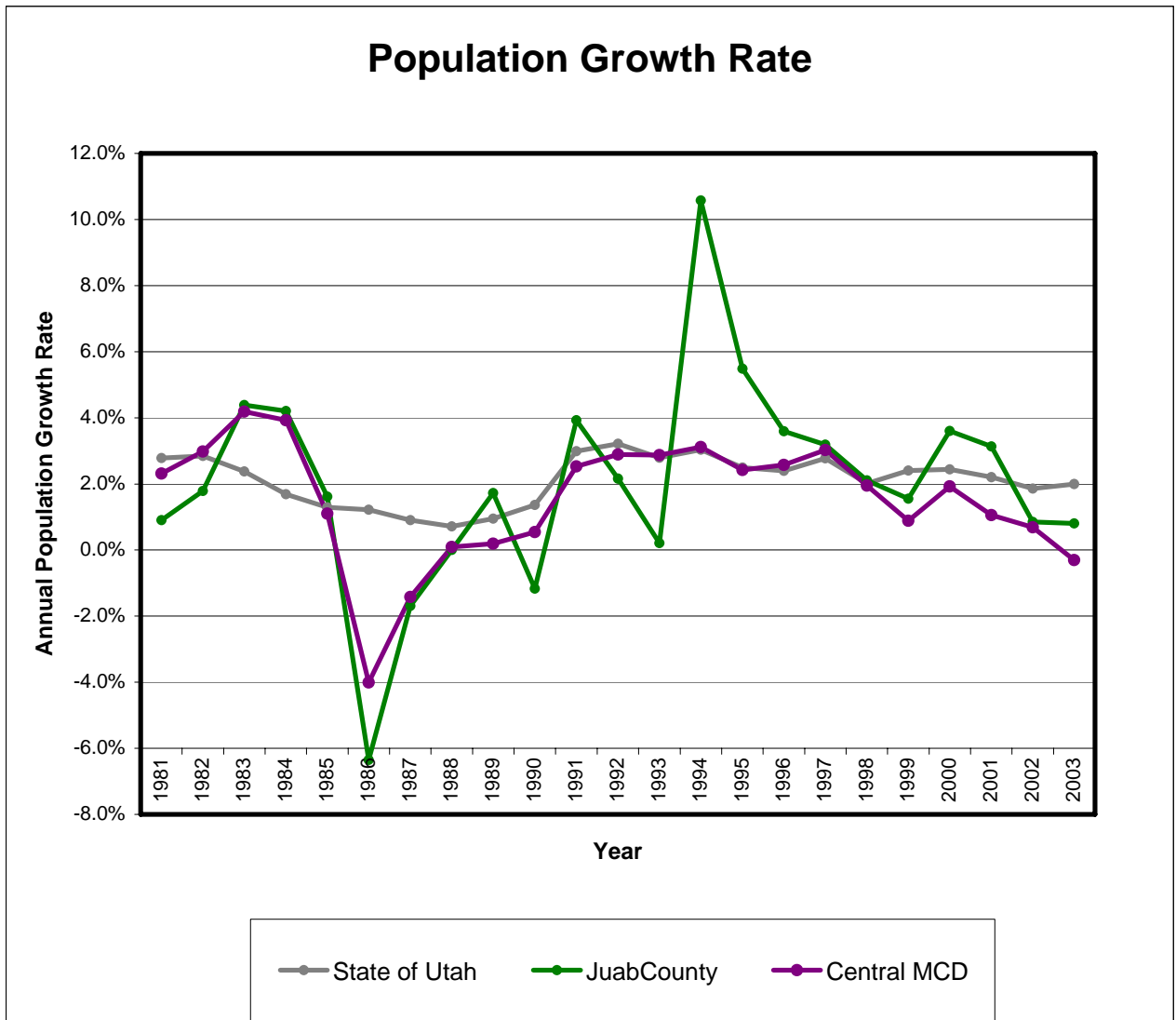
Decenial Population Change



Source Data: U.S. Bureau of the Census

<http://www.governor.utah./dea/OtherPublications.html>

Chart 2-3. Population Growth Rate (1980-2000)

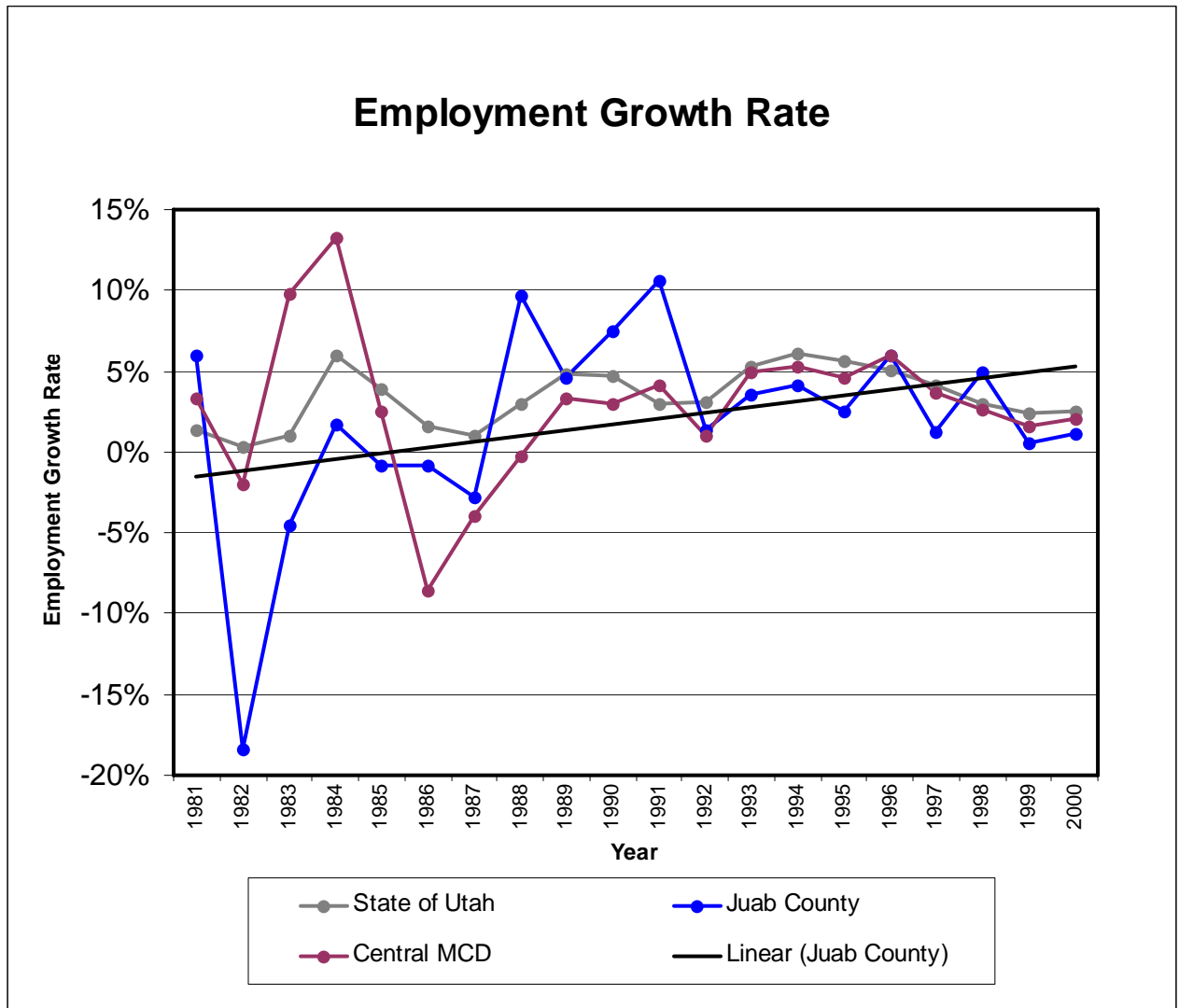


MCD = Multi-County Districts, Central MCD = Juab, Millard, Piute, Sanpete, Sevier & Wayne Counties

Source: Governors Office of Planning and Budget

<http://www.governor.utah.gov/dea>

Chart 2-4. Employment Growth Rate (1980-2000)



MCD = Multi-County Districts, Central MCD = Juab, Millard, Piute, Sanpete, Sevier & Wayne Counties

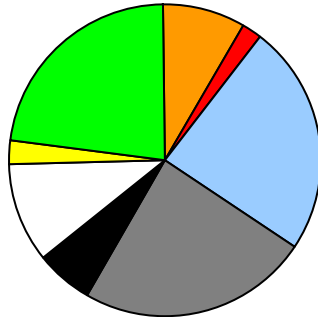
Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea>

Chart 2-5. Employment Sectors (1980-2000)

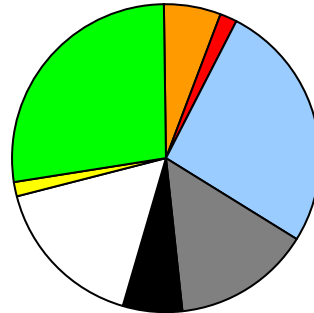
Sector	1980	1990	2000	$\Delta\%$ 1980-2000
Construction	8.71%	6.18%	4.64%	-25.16%
FIRE	2.02%	1.53%	1.56%	8.33%
Government	23.60%	26.18%	23.23%	38.33%
Manufacturing	23.82%	14.16%	12.12%	-28.54%
Mining	5.84%	6.06%	3.52%	-15.38%
Services	10.39%	16.60%	23.71%	220.54%
TCPU	2.70%	1.59%	1.20%	-37.50%
Trade	22.92%	27.71%	30.03%	84.07%

FIRE = Finance, Insurance & Real Estate
 TCPU = Telecommunications & Public Utilities

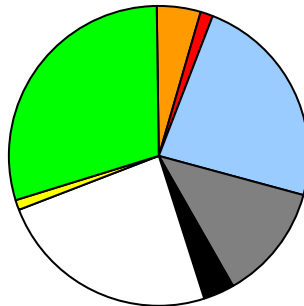
1980 Employment Sectors



1990 Employment Sectors



2000 Employment Sectors



Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea/HistoricalData.html>

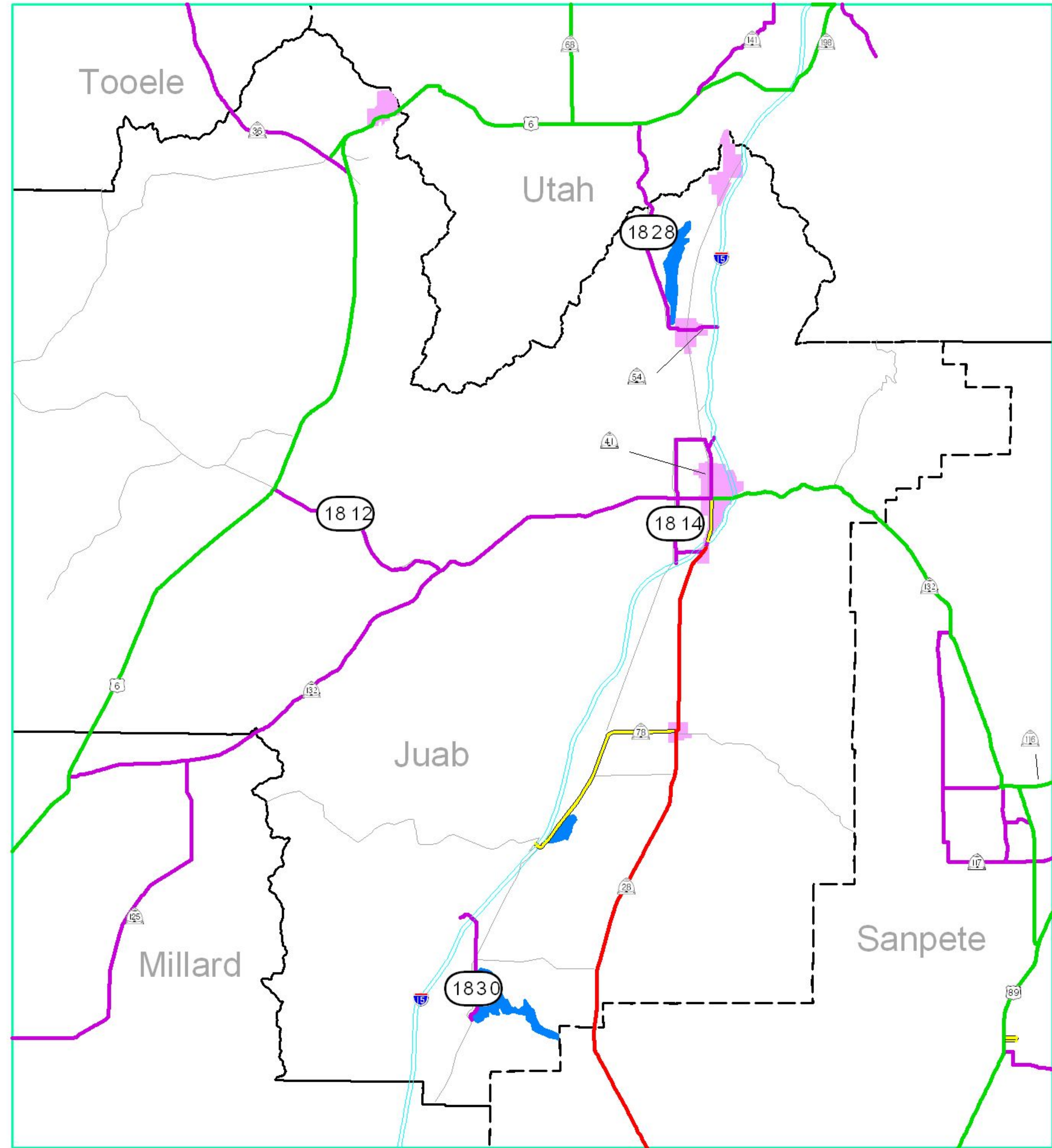
2.4. Functional Street Classification

This document identifies the current function and operational characteristics of the selected roadway network of East Juab County. Functional street classification is a subjective means to identify how a roadway functions and operates when a combination of the roadway's characteristics are evaluated. These characteristics include; roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.

The primary classifications used in classifying selected roadways of East Juab County are: Interstate, Principle Arterial, Minor Arterial, Major Collector, Minor Collector and Local. An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

The East Juab County area is accessed by I-15, US-6, SR-28, SR-41, SR-54 and SR-132. The functionally classified system has recently been revised statewide. The previous functionally classified system generally defined the higher traffic roads, so only minor additions or changes were required.

Figure 2-2: Existing State and Federal Routes Classification



Federally Classified Roads

- Interstate
- Other Principal Arterial
- Minor Arterial
- Collector
- Minor Collector
- Local Roads
- City Boundaries
- Water Bodies
- Study Boundary
- County Lines

1 0 1 2 3 4 5 6 7 8 9 10 Miles

2.5 Bridges

There are forty-nine bridges on the state system located in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. (Figure 2-3 Bridge Sufficiency Rating)

Table 1 compares the bridges in the study area and identifies their sufficiency rating and location. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding.

Table 1. Bridges

Number	Location	Maximum Span	No. Lanes & Road Width	Sidewalk	Sufficiency Rating
3C-609 nb	I-15, 8.5 Miles North of Mona Interchange	25.6m	2 lanes, 13.6 m	no	96.5
1C-609 sb	I-15, 8.5 Miles North of Mona Interchange	25.6m	2 lanes, 13.6 m	no	96.5
3C-608 sb	I-15, 5.4 Miles North of Mona Interchange	25.9 m	2 lanes, 13.4 m	no	93.5
1C-608 nb	I-15, 5.4 Miles North of Mona Interchange	25.9 m	2 lanes, 13.4 m	no	93.5
3C-606 sb	I-15, 2.0 Miles North of Mona Interchange	25.6 m	2 lanes, 13.4 m	no	95.6
1C-606 nb	I-15, 2.0 Miles North of Mona Interchange	25.6 m	2 lanes, 13.4 m	no	95.6
3C-607 sb	I-15/SR-54, Mona Interchange	35.1 m	2 lanes, 13.4	no	97.0
1C-607 nb	I-15/SR-54, Mona Interchange	35.1 m	2 lanes, 13.4	no	97.0
F-325	UP&L Access Road over I-15, 1.0 Mile South of Mona Interchange	85.0 m	2 lanes, 9.8 m	no	93.7
3C-610 sb	I-15, 2 Miles South of Mona Interchange	26.2 m	2 lanes, 13.4	no	97.5

1C-610 nb	I-15, 2 Miles South of Mona Interchange	26.2 m	2 lanes, 13.4	no	96.5
E-2132	Culvert under I-15, East Side of Nephi	6.7 m	4 lanes, 37.8	no	69.0
C-717	I-15/SR-41, Nephi Interchange	120.1 m	3 lanes, 17.8 m	no	98.2
3F-443 sb	I-15, 700 North Street, Northeast Side of Nephi	30.2 m	2 lanes, 13.5 m	no	84.7
1F-443 nb	I-15, 700 North Street, Northeast Side of Nephi	30.2 m	2 lanes, 13.5 m	no	95.7
C-716	County Road over I-15	92.7 m	2 lanes, 10.5m	no	100
3C-718 sb	I-15, East Side of Nephi	43.0 m	2 lanes, 13.5 m	no	97.7
1C-718 nb	I-15, East Side of Nephi	43.0 m	2 lanes, 13.5 m	no	97.7
3C-714 sb	I-15/SR-28, South Nephi Interchange	51.8 m	2 lanes, 13.5 m	no	96.7
1C-714 nb	I-15/SR-28, South Nephi Interchange	51.8 m	2 lanes, 13.5 m	no	96.7
3 F-448 sb	I-15 over UPRR, South of So. Nephi Interchange	68.6 m	2 lanes, 24.0m	no	97.6
1F-449 nb	I-15 over UPRR, South of So. Nephi Interchange	69.0 m	2 lanes, 14.0 m	no	97.6
1F-450	I-15, NB Off Ramp, South of South Nephi Interchange	67.7 m	1 lane, 9.2 m	no	78.6
3F-429 sb	I-15, .5 Miles South of South Nephi Interchange	35.1 m	2 lanes, 13.5 m	no	95.7
1F-429 nb	I-15, .5 Miles South of South Nephi Interchange	35.1 m	2 lanes, 13.5 m	no	95.7
3F-434 sb	I-15, 12 Miles North of Mills Jct.	28.3 m	2 lanes, 13.5 m	no	93.7
1F-434 nb	I-15, 12 Miles North of Mills Jct.	28.3 m	2 lanes, 13.5 m	no	93.7
3F-437 sb	I-15, 10 Miles North of Mills Jct.	23.8 m	2 lanes, 13.5 m	no	93.6
1F-437 nb	I-15, 10 Miles North of Mills Jct.	23.8 m	2 lanes, 13.5 m	no	93.7
3F-453 sb	I-15, 8 Miles North of Mills Jct.	20.7 m	2 lanes, 13.5 m	no	93.6
1F-453 nb	I-15, 8 Miles North of Mills Jct.	20.7 m	2 lanes, 13.5 m	no	93.6
3F-433 sb	I-15, 6 Miles North of Mills Jct.	21.9 m	2 lanes, 13.5 m	no	93.6

1F-433 nb	I-15, 6 Miles North of Mills Jct.	21.9 m	2 lanes, 13.5 m	no	93.7
3F-454 sb	I-15, 4 Miles North of Mills Jct.	20.1 m	2 lanes, 13.5m	no	97.6
1F-454 nb	I-15, 4 Miles North of Mills Jct.	20.1 m	2 lanes, 13.5m	no	97.7
3F-406 sb	I-15, North of Mills Jct./UPRR	58.2 m	2 lanes, 13.5 m	no	97.7
1F-406 nb	I-15, North of Mills Jct./UPRR	58.2 m	2 lanes, 13.5 m	no	96.7
E-2238	Box Culvert under I-15/Chicken Creek	7.3 m	4 lanes, 30.5 m	no	77.6
3F-435 sb	I-15/SR-78, Mills Jct. Interchange	27.7 m	2 lanes, 13.5m	no	95.6
1F-435 nb	I-15/SR-78, Mills Jct. Interchange	27.7 m	2 lanes, 13.5m	no	96.7
F-440	Yuba State Park Interchange Over I-15	86.3 m	2 lanes, 10.5 m	no	98.9
3F-432 sb	I-15, 11.5 Miles North of Scipio	36.6 m	2 lanes, 13.6 m	no	96.6
1F432 nb	I-15, 11.5 Miles North of Scipio	36.6 m	2 lanes, 13.6 m	no	97.7
3F-438 sb	I-15, Millard/Juab County Line/Deer Crossing	18.6 m	2 lanes, 13.5 m	no	97.6
1-438 nb	I-15, Millard/Juab County Line/Deer Crossing	18.6 m	2 lanes, 13.5 m	no	97.7
D-402	SR-41, 300 North in Nephi/Salt Creek	6.7 m	4 lanes, 39.6	yes	83.5
E-2445	Culvert under SR-132, 1.5 Miles East of Nephi/Salt Creek	6.7 m	2 lanes, 15.4 m	no	83.2
E-2185	Culvert under SR-132, 4.3 Miles East of Leamington/Central Utah Canel	6.7 m	2 lanes, 98.0 m	no	94.4
E-1161	Culvert under SR-28, 7 Miles South of Levan/Chriss Wash	7.9 m	2 lanes, 14.1 m	no	78.3

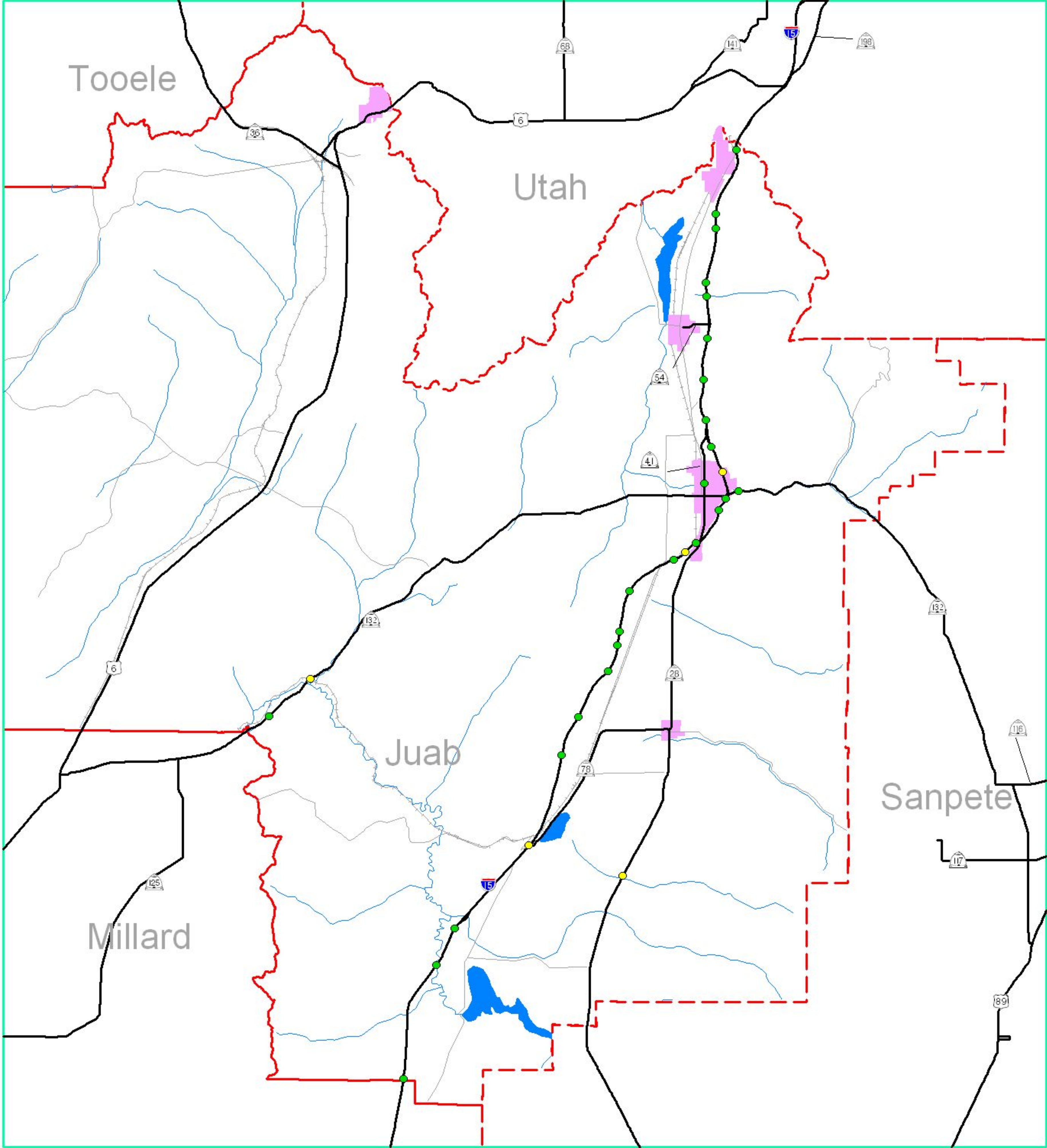
Bridge Sufficiency Rating – Figure 2-3

Source: Utah Department of Transportation/Structures Division

2.6 Traffic Counts

A major generator of traffic in Juab County on the weekends is the Little Sahara Recreation Area. Recent traffic counts were collected from the Bureau of Land Management. Traffic generated on Easter weekend 2004 was 8,100 vehicles, traffic generated on an average spring weekend is 1,550 vehicles, and on a average weekday is 30 vehicles. Two main routes from Juab County provide access to this recreation area. They are SR-132 and SR-6.

Figure 2-3: Bridge Sufficiency Rating



- State Bridges
- Eligible for Replacement Funds
 - Eligible for Rehabilitation Funds
 - Maintenance Funds Only
- State Roads
- Local Roads
- City Boundaries
- Railroads
- Water Courses
- Water Bodies
- Study Boundary
- County Lines

1 0 1 2 3 4 5 6 7 8 9 10 Miles

Recent average daily traffic count data were obtained from UDOT. Table 2 shows the traffic count data on the key roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

Table 2. Average Annual Daily Traffic

Road	Segment	Year	AADT
I-15	Millard/Juab County Line	2002	12,701
I-15	Yuba Lake Interchange	2002	12,732
I-15	Mills Levan Interchange	2002	12,620
I-15	Nephi Interchange/SR-132	2002	15,250
I-15	Nephi/Manti Interchange/SR-132	2002	17,672
I-15	Nephi Interchange/ SR-41	2002	23,680
I-15	Mona Interchange	2002	24,322
I-15	Juab/Utah County Line	2002	24,322
US-6	Millard/Juab County Line	2002	2,605
US-6	Tintic Junction SR-36	2002	1,590
US-6	Juab/Utah County Line	2002	1,450
SR-28	Sanpete/Juab County Line	2002	2,745
SR-28	Junction SR-78 in Levan	2002	3,000
SR-41	Junction SR-28	2002	3,525
SR-41	Junction SR-132 in Nephi	2002	5,440
SR-54	Main Street in Mona	2002	675
SR-54	East Incorporated Limits Mona/Jct. I-15	2002	720
SR-78	Junction I-15	2002	1,025
SR-78	West Incorporated Limits Levan/Jct. SR-28	2002	1,240
SR-132	Millard/Juab County Line	2002	1,505
SR-132	Junction SR-41 in Nephi	2002	3,075
SR-132	Junction I-15	2002	3,345
SR-132	Juab/Sanpete County Line	2002	2,850

Source: Utah Department of Transportation

These are averages for the entire year. East Juab County experiences a significant increase in traffic during the summer months. UDOT maintains 86 continuously operated automatic traffic recorders (ATR) throughout the state highway system. ATRs collect data continuously throughout the year in order to determine monthly, weekly, daily, and hourly traffic patterns. Two ATRs are located in or near the study area. The following points summarize the 2003 data from the ATR at this location.

No. 1 - Traffic on I-15, .5 Miles South on Nephi Interchange@ MP 222.64

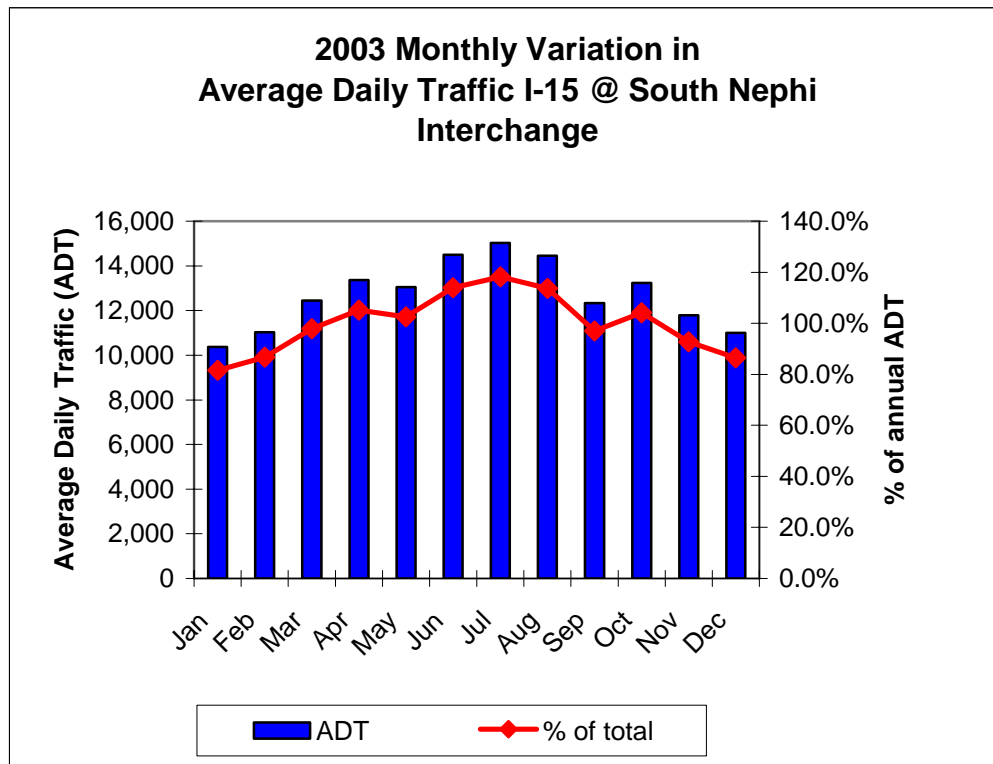
- July was the highest volume month.
- January was the lowest volume month.
- The highest daily volumes occurred on Sunday and Friday.
- The lowest daily volumes occurred on Tuesday.

The peak daily volumes of Sunday and Friday is consistent with traffic traveling through the area on their way to recreational usage in Southern Utah. This weekend peak is different than is experienced in many other areas around Utah and is important to planners trying to address the concerns of residents within Juab County.

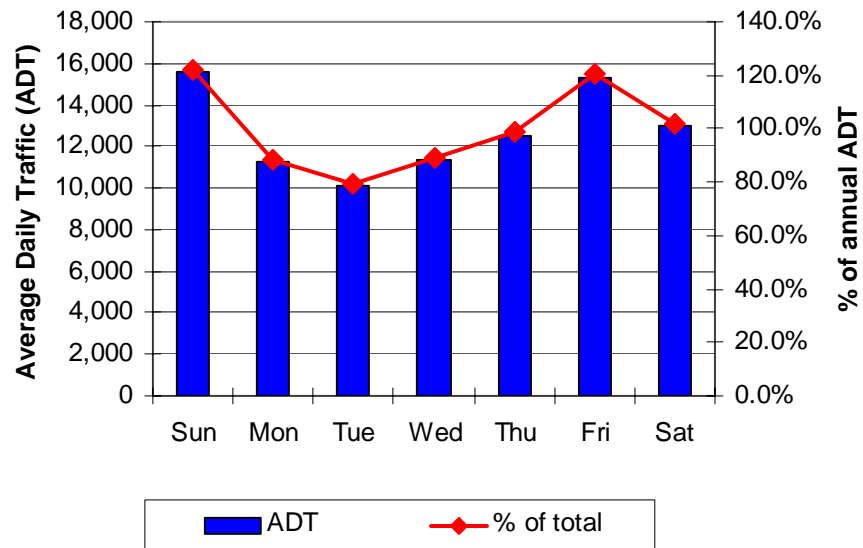
The hourly traffic shows a clear average peak hour of around 2:00 TO 5:00 pm. This is consistent with an afternoon commuter peak.

A map illustrating existing and future traffic, peak season traffic, and roadway capacities is presented in the Traffic Forecast section 3.2.

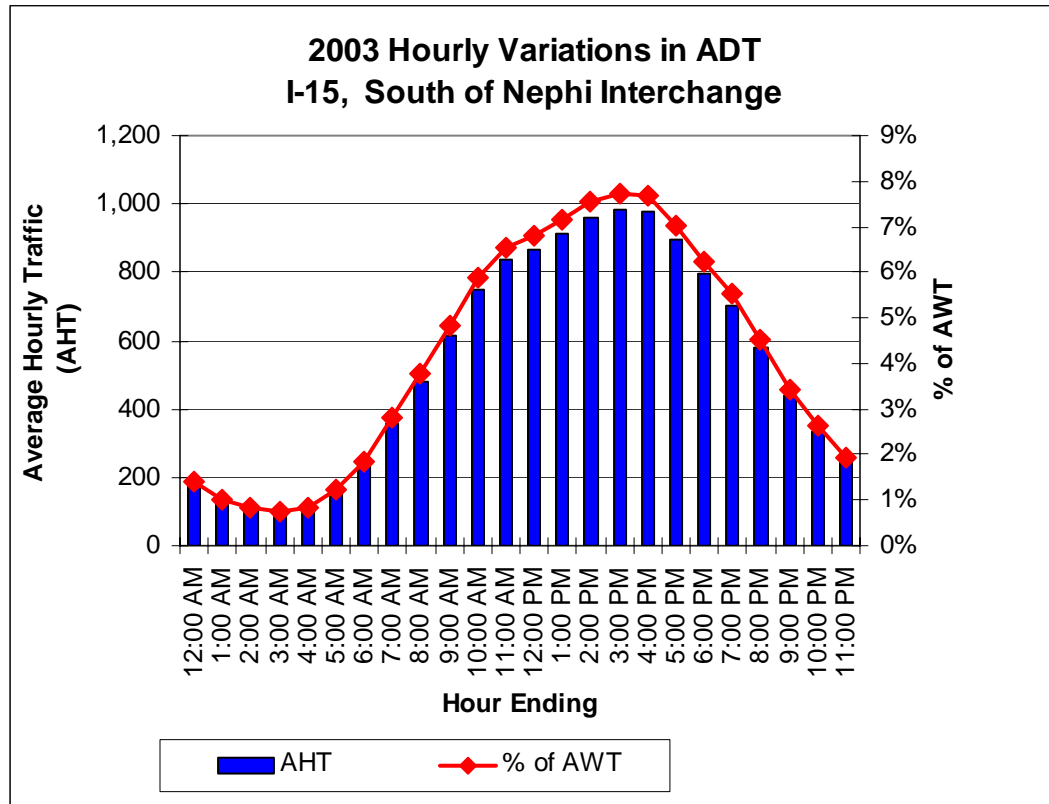
Monthly and Daily ADT on I-15



**2003 Daily Variation in
Average Daily Traffic I-15 @ South Nephi
Interchange**



Hourly Variation on I-15



Source: Utah Department of Transportation

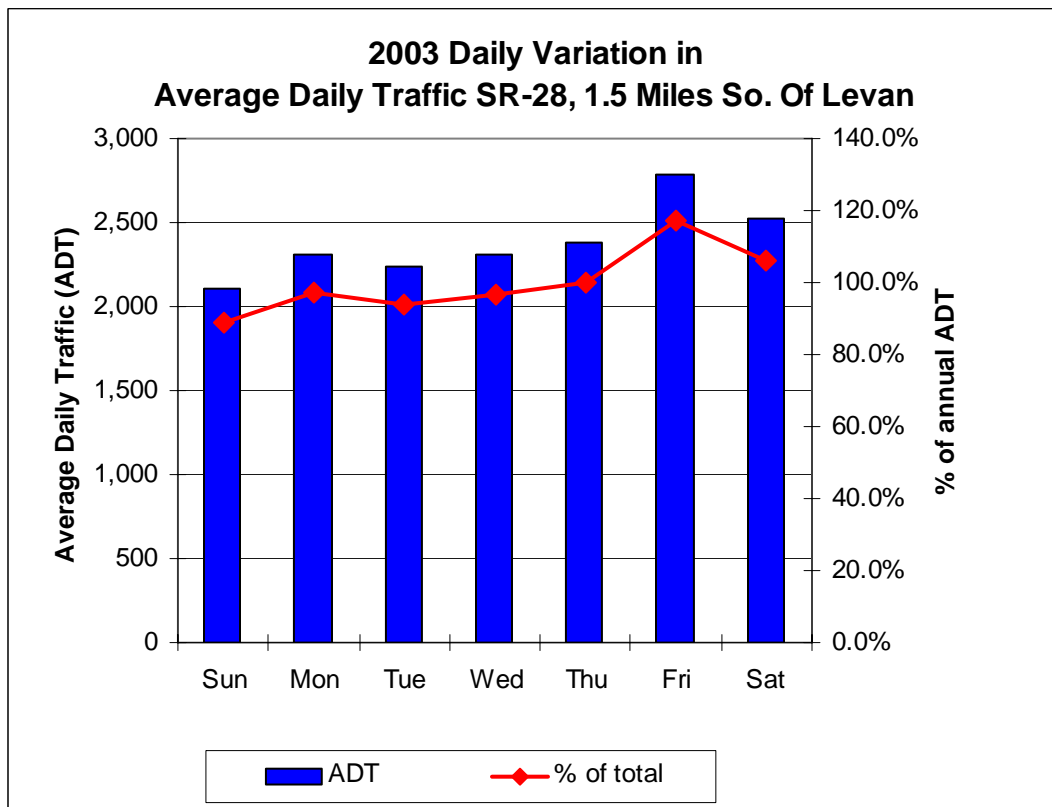
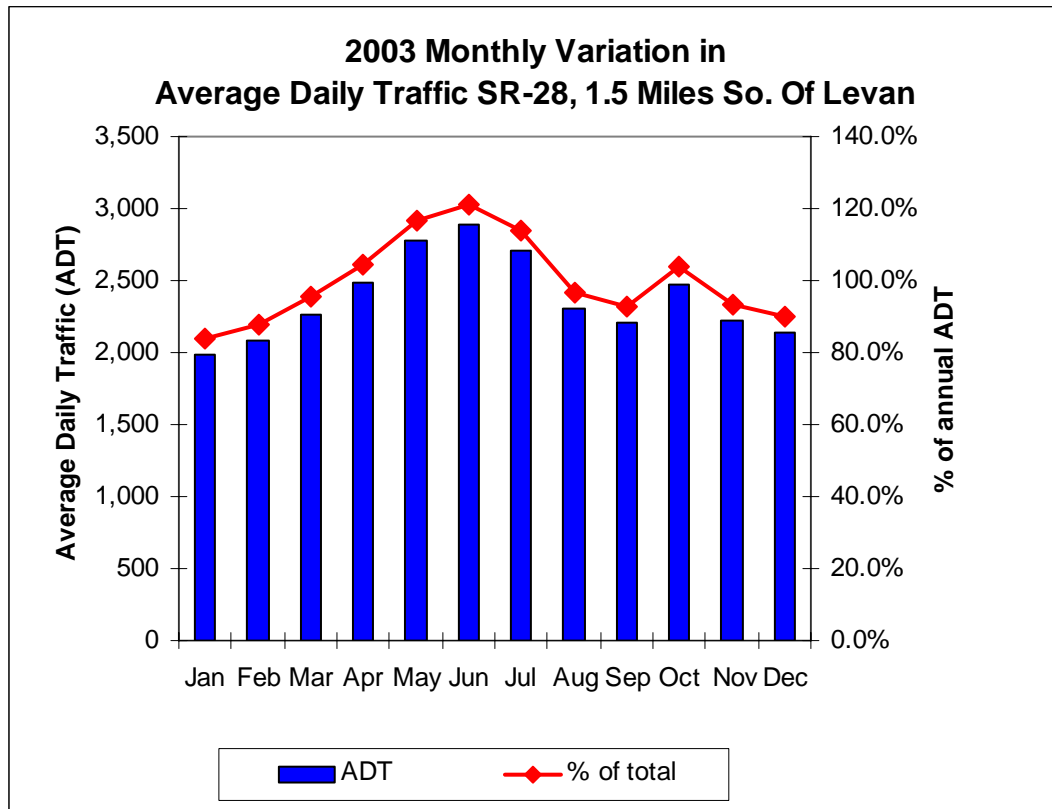
No. 2 - Traffic on SR-28, 1.5 Miles South of SR-78 in Laven @ MP 28.72

- June was the highest volume month.
- January was the lowest volume month.
- The highest daily volumes occurred on Friday.
- The lowest daily volumes occurred on Sunday.

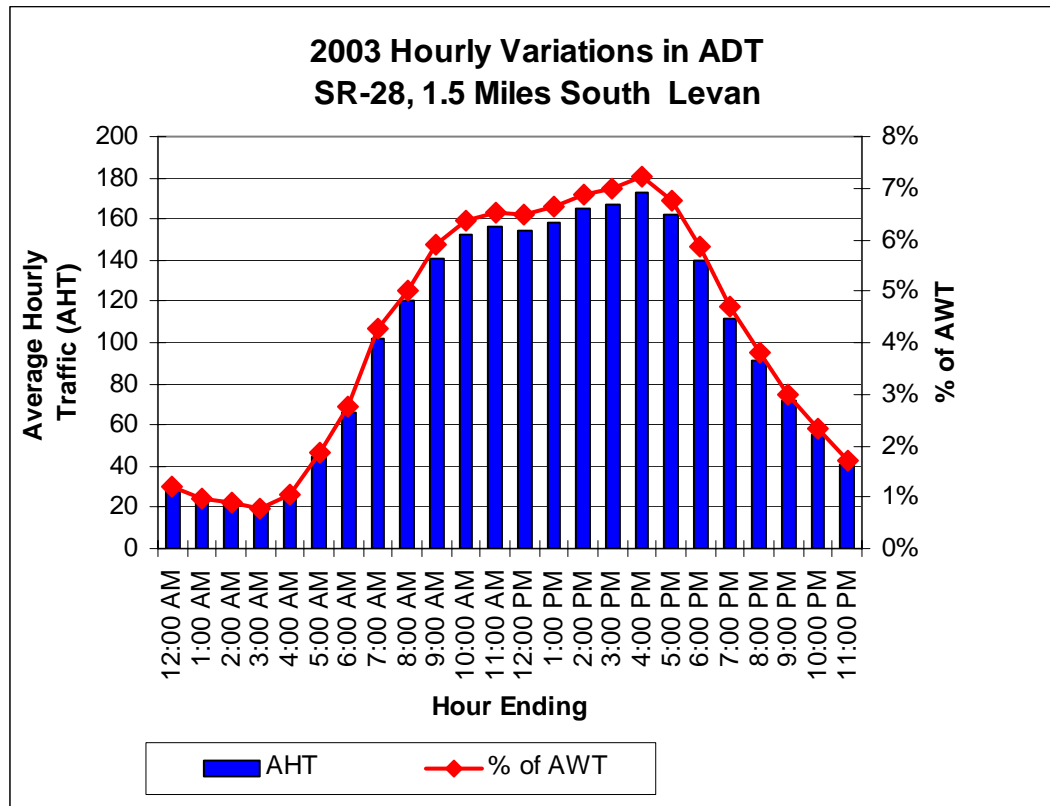
The hourly traffic shows a clear average peak hour of around 3:00 TO 5:00 pm. This is consistent with an afternoon commuter peak.

The peak daily volumes of Sunday and Friday is consistent with traffic traveling through the area on their way to recreational usage in Southern Utah. This weekend peak is different than is experienced in many other areas around Utah and is important to planners trying to address the concerns of residents within Juab County.

Monthly and Daily ADT on SR-28



Hourly Variation on SR-28



Source: Utah Department of Transportation

2.7 Traffic Accidents

Traffic accident data was obtained from UDOT's database of reported accidents from 2002. Table 3 summarizes the accident statistics for those segments for the year 2002. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the state.

Upon review of the accident data for the state system, there appears to be a higher than expected accident rates at the following locations:

- **US-6 from Milepost 140.99 to Milepost 142.0**
- **I-15 from Milepost 223.33 to Milepost 228.60**
- **SR-28 from Milepost 28.5 to Milepost 29.35**
- **SR-28 from Milepost 30.03 to Milepost 30.32**
- **SR-41 from Milepost 1.04 to Milepost 3.29**
- **SR-54 from Milepost 0.00 to Milepost 0.41**
- **SR-132 from Milepost 32.82 to Milepost 34.28**

The remainder of the state system shows a lower than expected accident rate. Figure 13 shows accident data taken from 1999-2001, which shows various segments of the state highway system and associated accident data.

East Juab County may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

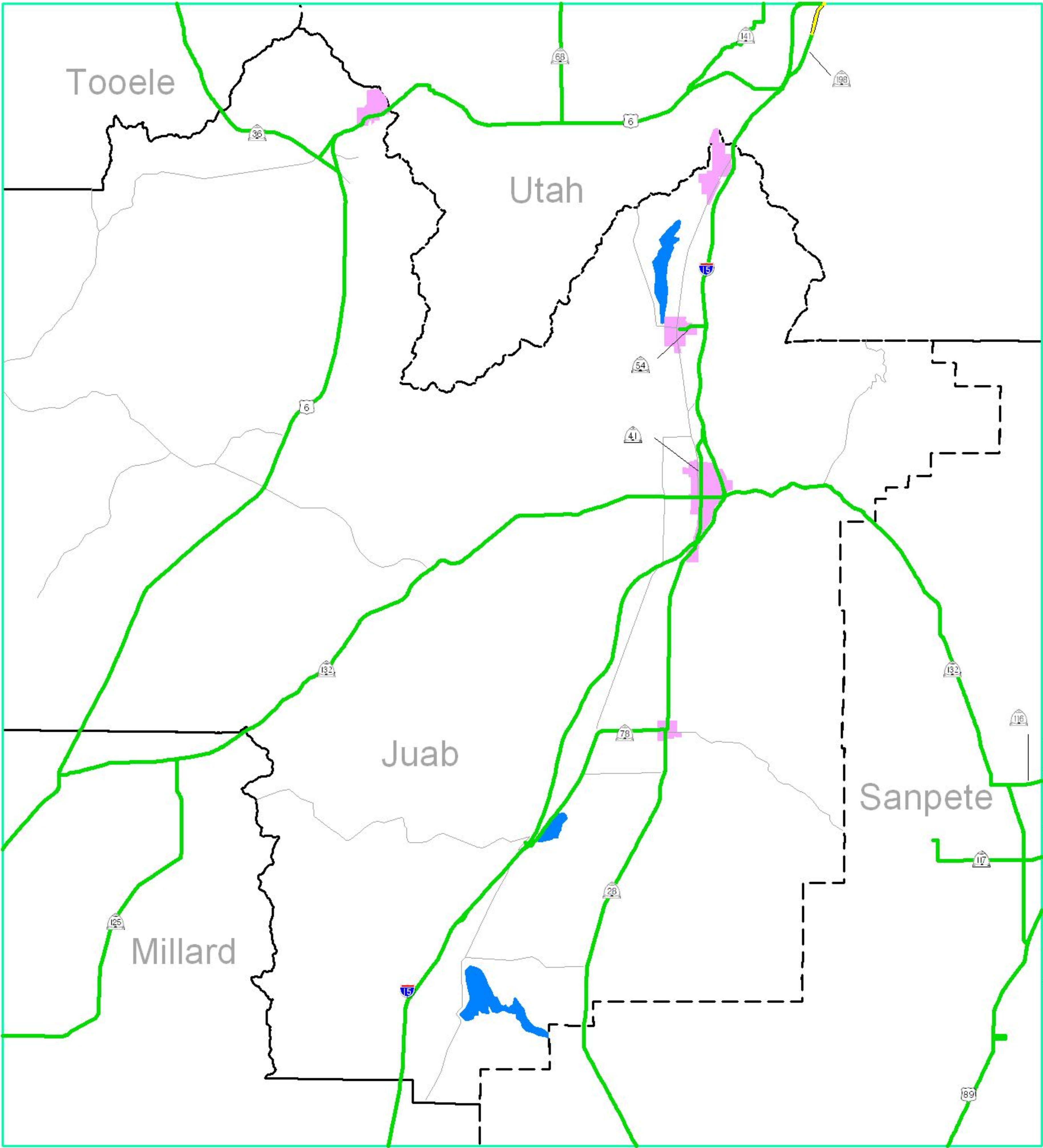
Table 3. Crash Data 2003

Road	From Milepost	End Milepost	ADT (2003)	# Crashes (2003)	Crash Rate	
					Actual	Expected*
6	139.23	140.28	1,113	1	1.20	2.19
6	140.29	140.98	1,239	1	2.14	2.19
6	140.99	142	1,365	4	6.89	2.19
15	222.5	223.32	12,745	2	0.51	0.95
15	223.33	225.78	15,224	19	1.41	0.95
15	225.79	228.6	17,470	18	1.02	0.95
15	228.6	233.68	23,915	29	0.66	0.86
15	233.69	242	24,540	42	0.70	0.86
28	28.5	29.35	2,385	4	4.56	1.54
28	29.36	30.02	3,430	0	0.00	1.54
28	30.03	30.32	2,960	1	2.76	1.54
28	30.33	38.98	3,380	11	1.06	1.54
41	0	1.03	3,465	2	1.58	1.98
41	1.04	1.87	4,200	9	8.18	1.98
41	1.88	3.29	5,345	10	3.78	1.98
41	3.3	4.76	4,335	3	1.27	1.98
54	0	0.41	795	1	10.44	2.37
54	0.42	1.26	835	0	0.00	2.37
78	8	9.03	1,010	1	2.22	2.37
78	9.04	9.42	1,220	0	0.00	2.37
132	31.75	32.81	1,500	1	1.78	2.19
132	32.82	33.24	2,370	1	3.05	2.19
132	33.25	34.28	3,285	3	2.76	1.78
132	34.29	35	2,975	1	1.21	1.78

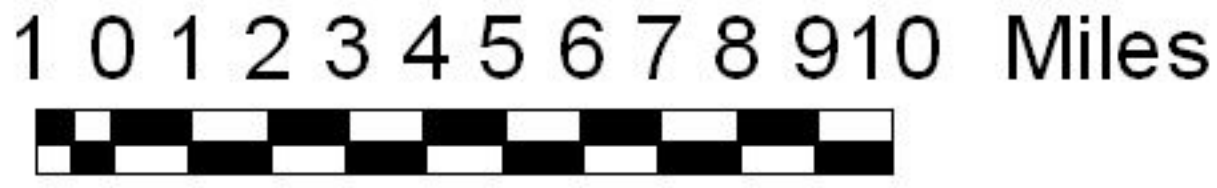
* Statewide average accident rates for functional class and volume group.

Red indicates higher than expected rates of accidents

Figure 2-4: State Road Safety Index



- State Road Safety Index Group
- Low
 - Medium
 - High
 - Local Roads
 - City Boundaries
 - Water Bodies
 - Study Boundary
 - County Lines



2.8 Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. In following this directive, Juab County is encouraged to adopt a “complete streets” philosophy that allows for the advancement of a transportation system for both motorized and non-motorized travel.

Juab County’s General Plan references the desire to develop and improve the area as a destination for tours and tourism, and work with private land owners, communities, and the Chamber of Commerce to develop facilities that will help realize this tourism goal. Additionally, the Juab County Travel Council web site states “tourism is a vital part of our economic basis. Sharing what we have with others, allows us to grow as a community”. Development of a robust bicycling plan could encourage cycling tourists to visit the area, creating the economic benefit the community desires.

2.8.1 Biking/Trails

There currently are not a lot of bicycling opportunities within eastern Juab County, and the County does not have any dedicated bike lanes in place. Shoulder conditions throughout the study area are varied; with some locations in need of additional shoulder-width in order to provide a safer traveling experience. Although not great in numbers, there are some on-street cyclists in eastern Juab County; most of these are residents.

The County has partnered with the Forest Service in developing some area mountain biking trails and is actively pursuing plans to establish some mountainous area ATV trails. Due to the popularity of ATV riding within the study area, the County recognizes that there is a need to create a designated trails system to reduce the amount of out-of-bounds riding.

2.8.2 Pedestrian

Accommodating pedestrian travel throughout eastern Juab County varies, depending on the location. Areas, such as downtown Nephi or school locations, will have a sidewalk system in place. At other locations within the study area, pedestrians are required to travel along the roadway or shoulder.

Some of the cities within eastern Juab County have utilized the Utah Department of Transportation’s Safe Sidewalk Program to install sidewalks in school zones. With the growth in the area and as additional schools are built, there is an increased need for sidewalks in these areas in order to provide for the safe travel of children. All new sidewalks constructed are ADA compliant, and older sidewalks are retrofitted to become ADA compliant, as funding allows.

2.9 Public Transportation

There is currently no local or intercity public transportation serving Nephi and eastern Juab County. Greyhound provides intercity bus service at both Provo and Filmore, Utah on a route linking Salt Lake City with Phoenix as well as a route between Los Angeles and New York City via Denver and Chicago. Each of these bus routes pass through Nephi on I-15 but no stops are made in the Nephi area.

Intercity rail passenger service is provided by Amtrak's "California Zephyr," which stops in both Salt Lake City and Provo on its route between Chicago, Denver and the San Francisco Bay Area.

Intercity airline service is provided at the Salt Lake City International Airport, which is about 100 miles to the north of Nephi.

2.10 Freight

Truck:

Nephi and eastern Juab County are located along one of western America's busiest and most important freight corridors, Interstate Highway 15. As it passes through the Nephi area, I-15 handles truck-transported freight traveling north and south on the "CANAMEX" Corridor, that links Mexico with Canada through the Mountain West. Additionally, freight en route from the industrial and agricultural centers of Alberta, Canada uses I-15 en route to the market centers and seaports of southern California.

I-15 is also a major link in America's east/west transcontinental highway freight flow. While a sizeable number of trucks feed into I-15 from I-70 at Cove Fort Junction south of Nephi, a considerable amount of east/west truck traffic passes through eastern Juab County en route to and from I-80 in Salt Lake City. These trucks are mostly headed for the Las Vegas area or southern California points.

State Route 132 connects with I-15 in Nephi providing direct access to the agricultural centers to the east in Sanpete County and to the west along the Sevier River and in the Delta/Lynndyl area of northeastern Millard County. S.R. 132 is also a preferred route for long-distance trucks en route from U.S. Highway 50 & 6 who are en route to I-15. These trucks use S.R. 132 to avoid the steep grades and sharp curves found on U.S. 6 crossing the Tintic Mountains at Eureka and Tintic.

Finally, S.R. 28 coming into Nephi from the south is a major truck route linking I-15 and I-70, as well as handling as many as 800-plus coal trucks per day en route from the Sufco Mine – Utah's largest coal mine – to a loadout along the Union Pacific Railroad near Levan. The proposed Central Utah Rail Project will extend rail service south to Salina, eliminating most of the aforementioned coal truck traffic from S.R. 28.

All of this truck traffic converging on I-15 at Nephi has resulted in several Truck Stops adjacent to the Interstate at Exit #222 at the south end of town. This concentration of truck traffic results in frequent congestion problems at this interchange.

Rail:

The Union Pacific Railroad provides railroad freight service to Nephi and eastern Juab County. Since 1903, UP's "Salt Lake Route" mainline linking Salt Lake City with southern California has bypassed the Nephi area via a newer and more direct line known as the Leamington Cutoff. The original rail line into the area is currently UP's Provo Line which runs from Salt Lake City south to Provo, Payson, and Nephi before passing through Sevier River Canyon to join the Leamington Cutoff route at Lynndyl.

Although most transcontinental freight uses the Leamington Cutoff between Lynndyl and Salt Lake City via Boulter Summit and Tooele, considerable freight traffic still passes through Nephi on the older Provo Line. Several transcontinental freight trains each day pass through Nephi en route to and from southern California, Salt Lake City and the Midwest.

The Provo Line also sees considerable coal train traffic en route from mines in Carbon County to the Intermountain Power Project complex near Delta, as well as coal consumers further south along the UP. Sufco Coal results in several coal trains per week originating at the Levan loadout destined for IPP, Nevada Power in Moapa, Nevada, as well as points north and east of Utah via Provo and Salt Lake City.

As previously mentioned, Seiver County and the Six County Association of Governments is moving forward with a proposal to construct a new railroad line extending approx. 43 miles south from the Union Pacific's Provo Line near Levan to the Salina/Sigurd area. Designated the Central Utah Rail Project, this proposed new railroad would allow UP unit coal trains closer access to the Sufco Mine east of Salina, thus eliminating most of the current coal truck traffic on S.R. 28 into the current Sufco loadout facility at Levan.

2.11 Aviation Facilities & Operations

Located at an elevation of 5,009 feet, Nephi Municipal Airport is located three miles northwest of town. Nephi Municipal Airport is currently undergoing an expansion and upgrading project that will result in a lengthened runway as well as a paved parallel taxiway. The following information reflects airport facilities once this on-going project is completed.

Nephi Municipal Airport is equipped with a single runway, #16/34, which is 6300 feet long, 100 feet wide, asphalt paved and equipped with pilot-activated lighting. There is a parallel paved taxiway adjacent to runway #16/34, which is also 6300 feet in length but only 35 feet wide. Runway #16/34 will be equipped with Precision Approach Path Indicator (PAPI) approach lighting, as well as Runway & Identifier Lights (REILS) as a part of the current upgrading program. The airport is also equipped with a dusk-to-dawn airways beacon light.

Nephi Municipal has paved parking and tie-downs for 11 aircraft. Mt. Nebo Aviation is the Fixed-Base Operator (FBO) at Nephi Municipal, providing both Jet A and 100 Low Lead aviation fuels.

There is no airfreight or scheduled airline service at Nephi; the nearest such services are at the Salt Lake City International Airport.

Future plans for Delta Municipal call for a runway crack seal project that should begin in 2005, along with improving the runway safety area by clearing brush and obstacles from along the runway right-of-way.

2.12 Revenue

Maintenance of existing transportation facilities and construction of new facilities come primarily from revenue sources that include the East Juab County general fund, federal funds and State Class C funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the County/Cities are limited in their ability to subsidize the transportation budget from general fund revenues.

2.12.1 State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Twenty-five percent of the funds derived from the taxes and fees are distributed to cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each city and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the class C roads weighted mileage within each municipality bear to the total class B and Class C roads weighted mileage within the state. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled road miles multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108) For more information go to UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Local Government Assistance" here you will find the Regulations governing Class B&C funds

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Apportionment Method of Class B and C Funds

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Pave Road (X 5) Graveled Road (X 2) Other Road (X 1)

50%	Total Population
-----	------------------

Class B and C funds can be used for maintenance and construction of highways, however thirty percent of the funds must be used for construction or maintenance projects that exceed \$40,000. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Juab County received \$1,650,076.04 in 2003 for its Class B&C fund allocation.

Nephi received \$ 228,963.55 in 2003 for its Class B&C fund allocation.

Mona received \$ 45,874.73 in 2003 for its Class B&C fund allocation.

Lavan received \$ 44,411.7 in 2003 for its Class B&C fund allocation.

2.12.2 Federal Funds

There are federal monies that are available to cities and counties through federal-aid program. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for urban areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation Commission for funding. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities to water runoff mitigation. Other funds that are available are State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region Three. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3 Local Funds

East Juab County, like most county/cities, has utilized general fund revenues in its transportation program. Other options available to improve the City's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits an identifiable group of

properties. Another source is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4 Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct local streets within the subdivisions and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts of the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

East Juab County's Transportation Master Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated into the evaluation and analysis of future transportation needs. This is done by:

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data are then used to identify future deficiencies in the transportation system.

3.1.1 Population and Employment Forecasts

The Governor's Office of Planning and Budget develop population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Nephi and East Juab County in the following table.

Population and Employment

Year	Nephi City	Juab County	
	Population	Population	Employment
2000	4,733	8,238	3,533
2030	9,052	14,338	6,859

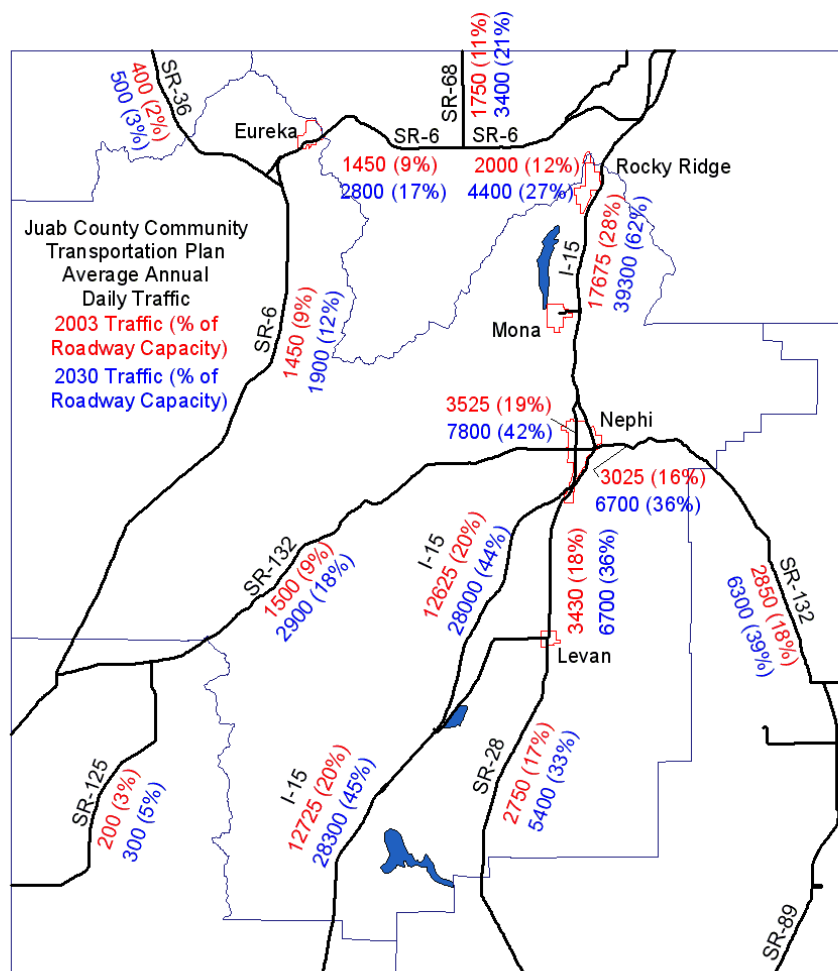
3.1.2 Future Land Use

Some areas for developments were discussed during the course of the Community Transportation Plan. Updated Land Use documents can be found in the East Juab County General Plan.

While specific development plans change with time, it is important to note possible areas of development within the East Juab County area. Commercial and industrial growth is also important in understanding transportation needs.

3.2 Traffic Forecast

Traffic in the Juab County area is growing and will continue to grow. Although the population projections from the Governors Office of Planning and Budget show a 2% to 3% annual growth, traffic has historically grown at about 3% to 4%. There are currently no roadways within Juab County that are operating at their maximum capacities. If historical growth continues on the same trend, there are no roads withat will reach capacity within the next 25 years.

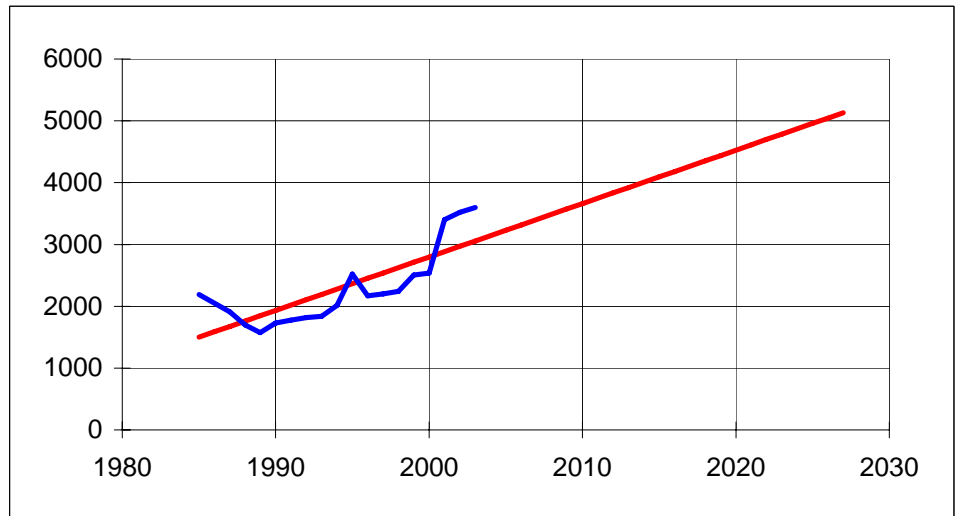




Route SR-6
 Limits SR-68 to east

Year	AADT	Forecast
1985	2,190	1501
1986	2,050	1587
1987	1,910	1674
1988	1,700	1760
1989	1,575	1846
1990	1,730	1933
1991	1,775	2019
1992	1,815	2106
1993	1,840	2192
1994	2,015	2279
1995	2,520	2365
1996	2,170	2451
1997	2,200	2538
1998	2,240	2624
1999	2,508	2711
2000	2,535	2797
2001	3,400	2884
2002	3,520	2970
2003	3,600	3056
2004		3143
2005		3229
2006		3316
2007		3402
2008		3488
2009		3575
2010		3661
2011		3748
2012		3834
2013		3921
2014		4007
2015		4093
2016		4180
2017		4266
2018		4353
2019		4439
2020		4526
2021		4612
2022		4698
2023		4785
2024		4871
2025		4958
2026		5044
2027		5130

Projection based on 1985 to 2003 data
 3.0% growth rate → 86 vehicles/year



5% Trucks

Notes

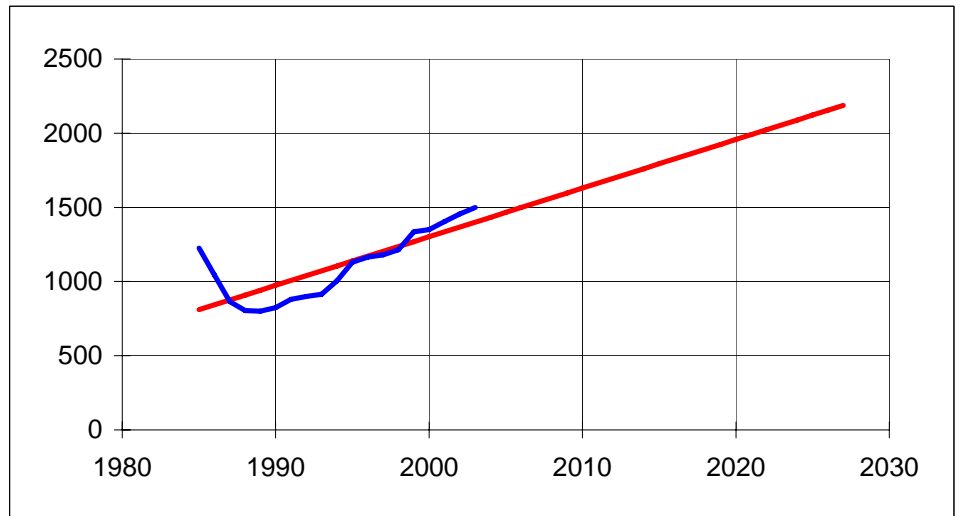
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-6
 Limits Jericho Junction to SR-36

Year	AADT	Forecast
1985	1,225	810
1986	1,045	843
1987	865	876
1988	805	909
1989	800	941
1990	825	974
1991	880	1007
1992	900	1040
1993	915	1072
1994	1,005	1105
1995	1,130	1138
1996	1,165	1171
1997	1,180	1204
1998	1,215	1236
1999	1,335	1269
2000	1,350	1302
2001	1,405	1335
2002	1,455	1368
2003	1,500	1400
2004		1433
2005		1466
2006		1499
2007		1531
2008		1564
2009		1597
2010		1630
2011		1663
2012		1695
2013		1728
2014		1761
2015		1794
2016		1826
2017		1859
2018		1892
2019		1925
2020		1958
2021		1990
2022		2023
2023		2056
2024		2089
2025		2121
2026		2154
2027		2187

Projection based on 1985 to 2003 data
 2.5% growth rate → 33 vehicles/year



5% Trucks

Notes

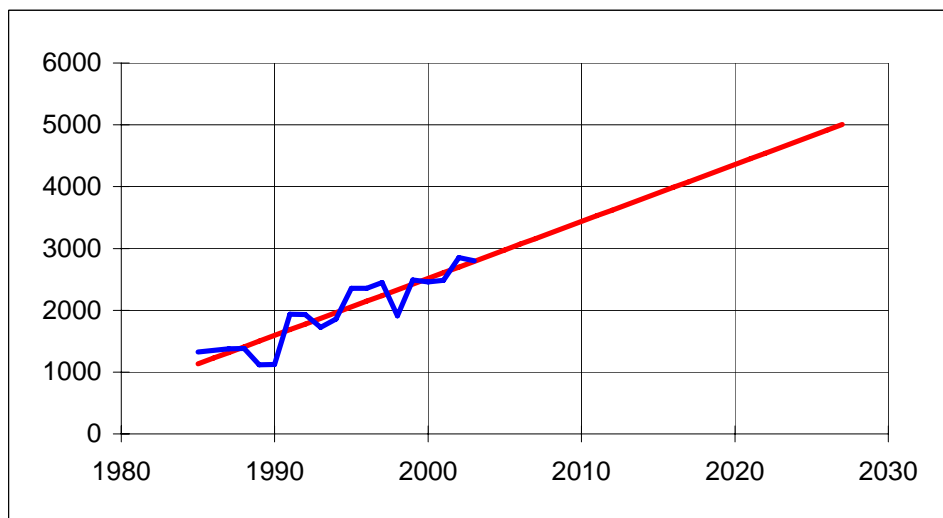
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-132
 Limits East of Nephi

Year	AADT	Forecast
1985	1,325	1133
1986	1,350	1225
1987	1,375	1317
1988	1,380	1409
1989	1,120	1501
1990	1,125	1593
1991	1,935	1686
1992	1,930	1778
1993	1,725	1870
1994	1,860	1962
1995	2,355	2054
1996	2,355	2146
1997	2,450	2239
1998	1,911	2331
1999	2,488	2423
2000	2,460	2515
2001	2,485	2607
2002	2,850	2699
2003	2,800	2792
2004		2884
2005		2976
2006		3068
2007		3160
2008		3252
2009		3345
2010		3437
2011		3529
2012		3621
2013		3713
2014		3805
2015		3898
2016		3990
2017		4082
2018		4174
2019		4266
2020		4358
2021		4451
2022		4543
2023		4635
2024		4727
2025		4819
2026		4911
2027		5003

Projection based on 1985 to 2003 data
 3.5% growth rate → 92 vehicles/year



5% Trucks

Notes

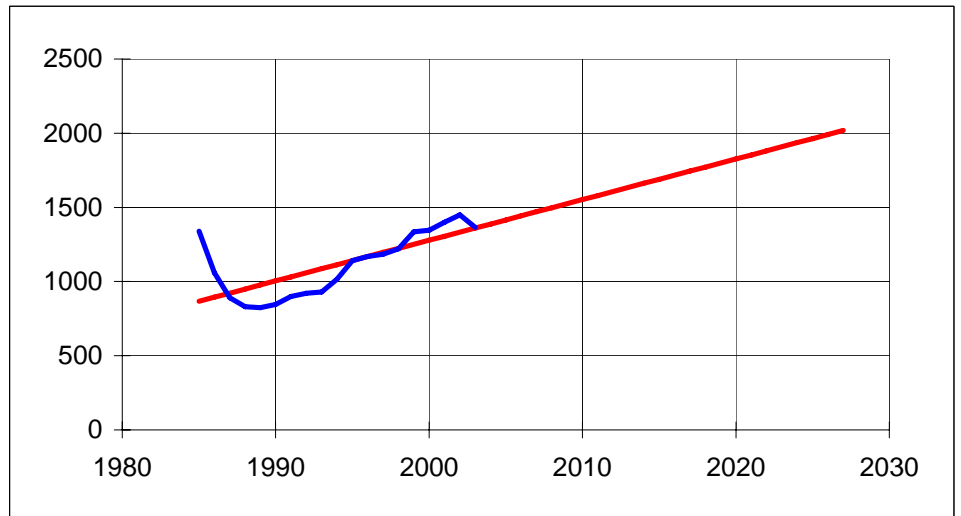
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-6
 Limits SR-36 to SR-68

Year	AADT	Forecast
1985	1,340	867
1986	1,060	895
1987	890	922
1988	830	950
1989	825	977
1990	845	1004
1991	900	1032
1992	920	1059
1993	930	1087
1994	1,015	1114
1995	1,140	1141
1996	1,170	1169
1997	1,185	1196
1998	1,220	1224
1999	1,335	1251
2000	1,345	1278
2001	1,400	1306
2002	1,450	1333
2003	1,365	1361
2004		1388
2005		1415
2006		1443
2007		1470
2008		1498
2009		1525
2010		1552
2011		1580
2012		1607
2013		1635
2014		1662
2015		1689
2016		1717
2017		1744
2018		1772
2019		1799
2020		1826
2021		1854
2022		1881
2023		1909
2024		1936
2025		1963
2026		1991
2027		2018

Projection based on 1985 to 2003 data
 2.1% growth rate → 27 vehicles/year



5% Trucks

Notes

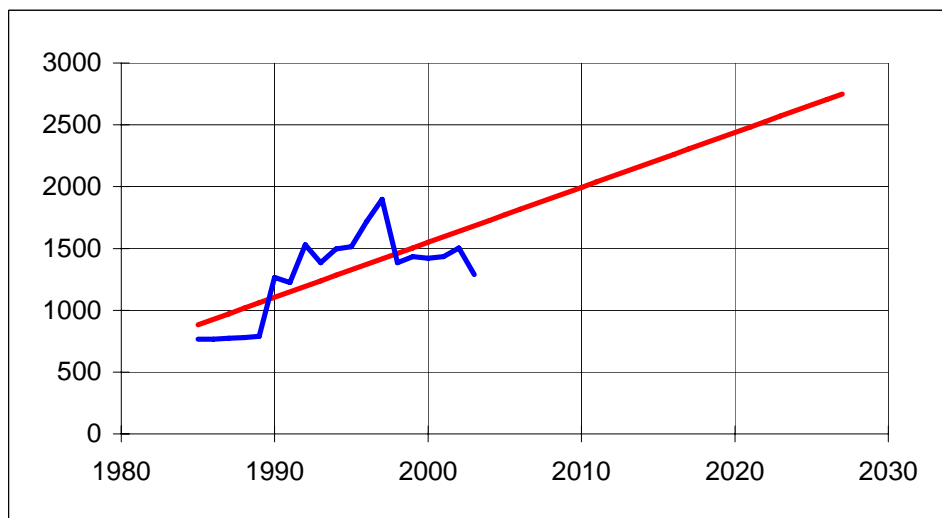
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-132
 Limits SR-125 to Sand Dunes turnoff

Year	AADT	Forecast
1985	765	883
1986	765	927
1987	775	972
1988	780	1016
1989	790	1061
1990	1,265	1105
1991	1,225	1150
1992	1,530	1194
1993	1,385	1239
1994	1,495	1283
1995	1,515	1327
1996	1,720	1372
1997	1,897	1416
1998	1,384	1461
1999	1,435	1505
2000	1,420	1550
2001	1,435	1594
2002	1,505	1638
2003	1,290	1683
2004		1727
2005		1772
2006		1816
2007		1861
2008		1905
2009		1950
2010		1994
2011		2038
2012		2083
2013		2127
2014		2172
2015		2216
2016		2261
2017		2305
2018		2350
2019		2394
2020		2438
2021		2483
2022		2527
2023		2572
2024		2616
2025		2661
2026		2705
2027		2750

Projection based on 1985 to 2003 data
 2.8% growth rate → 44 vehicles/year



5% Trucks

Notes

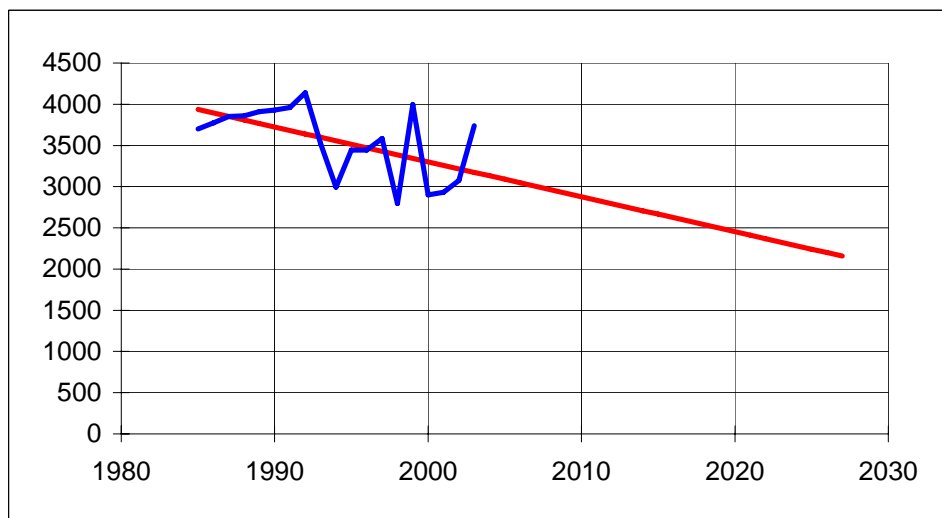
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-132
 Limits In Nephi

Year	AADT	Forecast
1985	3,700	3937
1986	3,775	3894
1987	3,850	3852
1988	3,860	3809
1989	3,910	3767
1990	3,930	3725
1991	3,960	3682
1992	4,140	3640
1993	3,520	3598
1994	2,995	3555
1995	3,445	3513
1996	3,445	3471
1997	3,585	3428
1998	2,796	3386
1999	3,994	3343
2000	2,900	3301
2001	2,930	3259
2002	3,075	3216
2003	3,740	3174
2004		3132
2005		3089
2006		3047
2007		3005
2008		2962
2009		2920
2010		2877
2011		2835
2012		2793
2013		2750
2014		2708
2015		2666
2016		2623
2017		2581
2018		2539
2019		2496
2020		2454
2021		2412
2022		2369
2023		2327
2024		2284
2025		2242
2026		2200
2027		2157

Projection based on 1985 to 2003 data
 -1.3% growth rate → (42) vehicles/year



5% Trucks

Notes

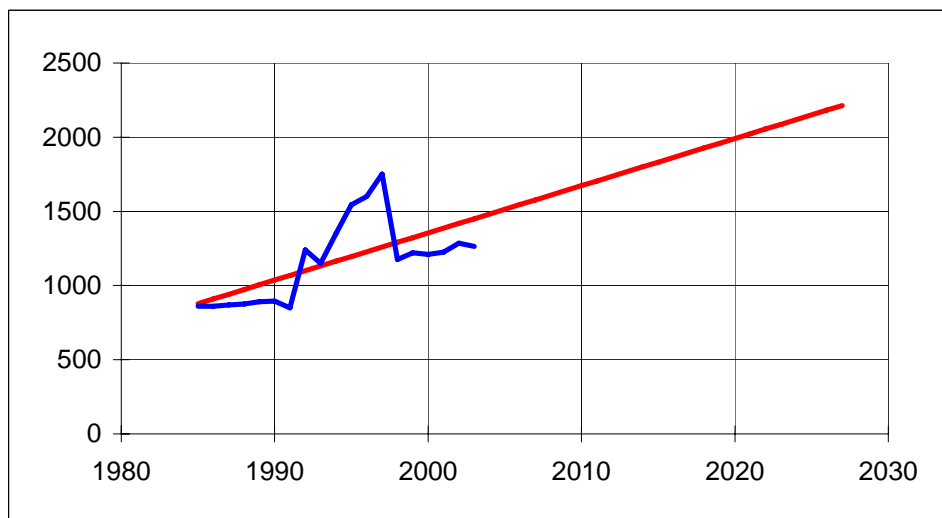
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-132
 Limits SR-6 to SR 125

Year	AADT	Forecast
1985	860	878
1986	860	910
1987	870	941
1988	875	973
1989	890	1005
1990	895	1037
1991	850	1069
1992	1,240	1100
1993	1,150	1132
1994	1,350	1164
1995	1,545	1196
1996	1,600	1228
1997	1,752	1259
1998	1,175	1291
1999	1,220	1323
2000	1,210	1355
2001	1,225	1387
2002	1,285	1419
2003	1,265	1450
2004		1482
2005		1514
2006		1546
2007		1578
2008		1609
2009		1641
2010		1673
2011		1705
2012		1737
2013		1768
2014		1800
2015		1832
2016		1864
2017		1896
2018		1927
2019		1959
2020		1991
2021		2023
2022		2055
2023		2087
2024		2118
2025		2150
2026		2182
2027		2214

Projection based on 1985 to 2003 data
 2.3% growth rate → 32 vehicles/year



5% Trucks

Notes

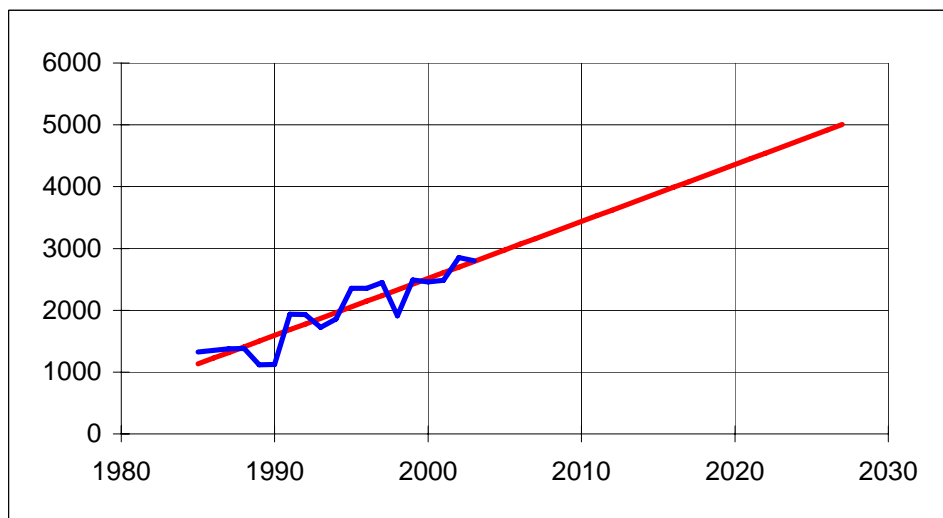
This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.



Route SR-132
 Limits East of Nephi

Year	AADT	Forecast
1985	1,325	1133
1986	1,350	1225
1987	1,375	1317
1988	1,380	1409
1989	1,120	1501
1990	1,125	1593
1991	1,935	1686
1992	1,930	1778
1993	1,725	1870
1994	1,860	1962
1995	2,355	2054
1996	2,355	2146
1997	2,450	2239
1998	1,911	2331
1999	2,488	2423
2000	2,460	2515
2001	2,485	2607
2002	2,850	2699
2003	2,800	2792
2004		2884
2005		2976
2006		3068
2007		3160
2008		3252
2009		3345
2010		3437
2011		3529
2012		3621
2013		3713
2014		3805
2015		3898
2016		3990
2017		4082
2018		4174
2019		4266
2020		4358
2021		4451
2022		4543
2023		4635
2024		4727
2025		4819
2026		4911
2027		5003

Projection based on 1985 to 2003 data
 3.5% growth rate → 92 vehicles/year



5% Trucks

Notes

This future traffic projection is based on historical volumes. It should be used for comparison purposes only. The local Metropolitan Planning Organization will have a more analytical future traffic projection based on their Travel Demand Model.

4. Planning Issues and Guidelines

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

4.1 Guidelines and Policies

These guidelines address certain areas of concern that are applicable to East Juab County's Community Transportation Plan.

4.1.1 Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

4.1.1.1 Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access Management is one tool of many that makes a traffic system work better with what is available.

4.1.1.2 Access Management Techniques

There are many techniques that can be used in access management. The most common techniques are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each spacing, dependant upon the roadway type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Region Permits Officer.

4.1.1.3 Where to Use Access Management

Access Management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

4.1.2 Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project become better for all of the entities involved.

4.1.3 Recommended Roadway Cross Sections

Cross sections are the combination of the individual design elements that constitute the design of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements. Suggested types of cross-sections can be found in figure 4-1.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on street parking, and control of driveway access. For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption in utility repairs or changes in service are needed.

Federal Highway standard widths apply on the all roads that are part of the state highway system. Also, all federally funded roadways in East Juab County must adhere to the same standards for widths and design.

4.2 Bicycles and Pedestrians

4.2.1 Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling within the study area, the County should consider requiring developers to include separate bicycle/pedestrian pathways in all new developments. Opportunities to include bike lanes and increased shoulder-width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible. Nephi City is currently working on a Bicycle Master Plan and should continue with the development of this plan. The minimum width on any proposed bicycle paths should be ten feet to allow for those bikes with trailers for infants and toddlers to pass one another without any major conflicts.

As referenced in Chapter 2 of this Plan, Juab County is a rural environment and as such accepts that ATV use will be an activity that the community will continue to enjoy. The County should proceed with plans to establish an ATV trails system in conjunction with the Forest Service. Development of an area-wide trails master plan would include the needs of ATV riders as well as bicyclists and pedestrians.

As Juab County continues to grow, a master plan will provide guidance for alternative and recreational modes of travel to enhance the quality of life for those in the community. It is important to note that regardless of the trails system's function, as the bike/trail facilities are planned, designed and constructed, the County should review the connectivity of the system. With input from the community, a review of the connectivity of the trails should play an integral role in the decision making process for potential projects. In order to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

4.2.2 Pedestrians

Although current conditions in eastern Juab County are such that pedestrian accommodations vary dependent on location, as growth occurs throughout the area care should be taken to address the needs of pedestrians. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. For the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. Juab County may require that new developments include sidewalk in all project plans, whether commercial or residential. To allow for pedestrian travel, the interconnectedness within each city's sidewalk system should be considered as development takes place.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers or in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage a higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed, as well as the 2004 AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities.

The cities within eastern Juab County should continue to work with the Utah Department of Transportation in utilizing funds through the Safe Sidewalk Program to make improvements to their sidewalk system. The Program is administered by UDOT's Traffic and Safety Division and the interested agencies should contact UDOT's Region Three office for application requirements.

The County should be aware of, and coordinate with, the area schools that are tasked with developing a routing plan to provide a safe route to school. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

4.3 Enhancements Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been reauthorized in subsequent bills (i.e. TEA-21). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by TEA-21:

The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, any of the following activities if such activity relates to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archeological planning and research, environmental mitigation to address water pollution due to highway runoff or reduce vehicle caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and Applications for the current cycle can be found on UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select "Planning and Programming", here you will find a sub-topic entitled "Transportation Enhancement Program". Applications must be received by the UDOT Program Development Office, on or before the specified date to be considered. Projects will compete on a statewide basis.

4.4 Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping East Juab County's Community Transportation Plan. This section will define what Corridor Preservation is and ways to use it to help the Community Transportation Plan succeed for the County.

4.4.1 Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the public and the city. The land along the corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which will be discussed here.

4.4.2 Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

4.4.2.1 Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the city is able to acquire undeveloped property, the city has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the County/Cities. Acquisition of land should be the last resort in any of the cases for Transportation Corridor Preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public Land Exchanges
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

4.4.2.2 Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be

helpful in preserving corridors for the Community Transportation Plan. Many of the ordinances that can be used for corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

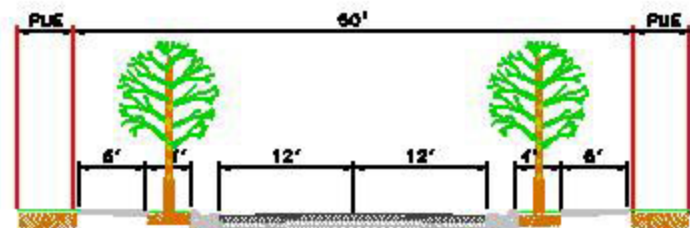
- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

4.4.2.3 Voluntary Agreements and Governmental Inducements

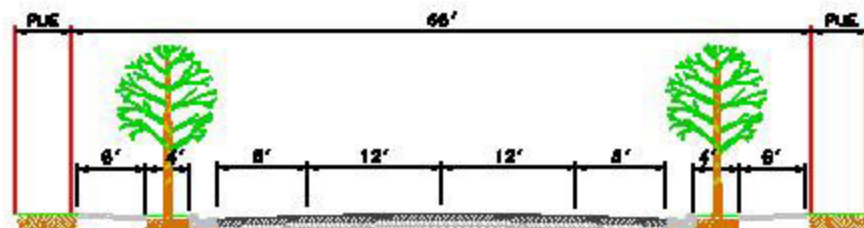
Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental inducements that can be used in order to preserve transportation corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights
- Tax Abatement
- Agricultural Zoning

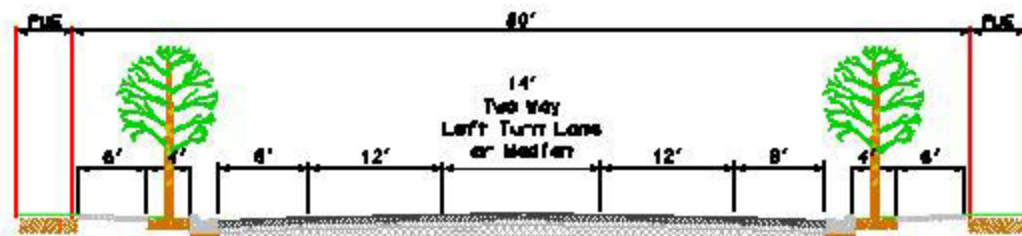
Each of these methods has its place, but there is an order that any government should try to use. Voluntary agreements and government inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit to aid in corridor preservation techniques. This toolkit contains references to Utah code and examples of how the techniques have been used in the past.



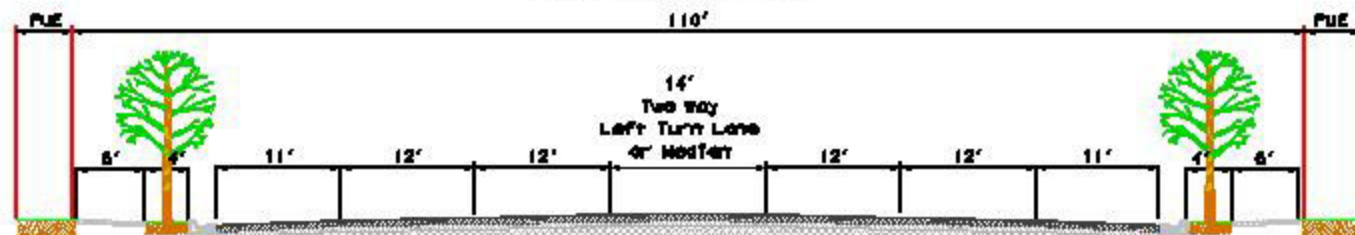
Two-Lane Cross Section
24 feet MAXIMUM ASPHALT WIDTH



Two Lane Cross Section
With Shoulders
Spaced between Arterials



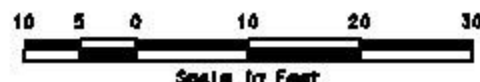
Three Lane Cross Section
With Shoulder
Spaced between Arterials



Five Lane Cross Section
With Shoulders
Minimum spacing approximately 1/4 mile

Notes:

1. Shoulder Dimension varies from 4' to 8' (See UDOT Std. Dev. 011 Note 3)
2. Public Utility Easement (PUE) dimension varies from 2.5' to 12' Typical
3. Shoulder Dimensions:
on 60' ROW - varies from 8' to 12'
on 110' ROW - varies from 10' to 12'
See AASHTO & Palmy on Geometric Design of Highways and Streets



**Suggested
Typical Cross Section**

Revised: September 16, 2004

5. Transportation Improvement Projects

5.1 Current Statewide Transportation Improvement Program (2005-2009 STIP)

At the present time these projects are under consideration and investigation in the East Juab County area. Currently in the STIP are the following Projects:

- Safety Spot Improvement Project, Replace Texas Turn Downs on I-15 Beginning at Reference Post 194.
- Non Urban-Local Project, Preliminary Engineering Phase II on SR-1826, Old Hwy 91; Mona to North Juab County Line.
- Concrete Pavement Rehabilitation Project on I-15; South Nephi to North Nephi Beginning at Reference Post 223.
- Bridge Scour Project (# C-249) on SR-132 Over Sevier River.
- Concrete Pavement Rehabilitation Project on I-15; Juab County to Sevier River Beginning at Reference Post 194.
- Preliminary Engineering for Bridge Replacement (# 023005D) on County Road over Yuba Dam Spillway.
- New Rest Area Construction on I-15 at Mills Rest Area at Reference Post 206.

Also, these projects are currently listed on the State of Utah's Long Range Plan, Utah Transportation 2030:

- Reconstruction Project on SR-28 from SR-78 to I-15.
- Reconstruction Project on SR-41 from North Nephi to Concrete.
- Reconstruction Project on US-6 from Eureka to Juab County Line.
- Reconstruction/Bridge Project on I-15 from Reference Post 200 to SR-28 in Gunnison.
- Reconstruction/Safety Project on I-15 from Reference Post 230 to US-6 off ramp.
- Safety Project on SR-28 from Reference Post 23 to SR-78.
- Reconstruction/Safety Project on SR-36 from US-6 to Juab County Line.
- Reconstruction Project on SR-36 South Leg.
- Reconstruction Project on SR-41 through Nephi.
- Reconstruction/Bridge Project on SR-132 throughout Juab County.
- New Runway at Nephi Airport.

5.2 Recommended Projects

The following list identifies the six projects that have been identified as having the highest priority to the East Juab County Transportation Advisory Committee. These needs were identified through a series of meetings where the TAC identified the needs and set priorities for projects.

- Construction of a deer fence along SR-28 from Interstate 15 to Yuba Lake
- Increase capacity along SR-28 from Nephi to Levan
- Improve circulation on the west side of Nephi Valley with a Circulation Master Plan and the construction of the roadway system that is recommended from that plan.



- County wide Drainage Master Plan
- Improving the railroad crossing at SR-132
- Extension of East Frontage Road from Middle interchange in Nephi to North Interchange in Nephi

Additionally, many concerns and issues were identified which are found on the attached list.

Juab County Transportation
Issues List and Cost Estimates

Region	City	Route or Street Name	General Location Description	Description of Issue	Planning Level Cost Estimate
3		Goshen Canyon Road	Through Goshen Canyon	Straighten Road through canyon	\$50,000,000
3		County Roads	County roads on west side of valley	Widen road to improve safety and capacity	\$50.00/Linear Foot
3		County Roads	County roads on west side of valley	Extend to new roads for circulation in the valley	\$70.00/Linear Foot
3	Rocky Ridge/Mona/Nephi/Levan	County wide pedestrian / ATV / bicycle plan	Multi-modal study coordinated throughout the County	Study	\$75,000
3	Rocky Ridge/Mona/Nephi/Levan	Utility Plan	Utility plan coordinated throughout the County	Study	\$75,000
3	Rocky Ridge/Mona/Nephi/Levan		Mass Transit commuter link to Utah/Salt Lake Counties	Commuter bus	\$150,000/yr
3	Rocky Ridge	Rocky Ridge Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Rocky Ridge	1st road south of Rocky Ridge Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Rocky Ridge/Mona/Nephi	Old highway 91	Increase roadway capacity to five lanes	Road widening Santaquin to Nephi	\$16,200,000
3	Mona	Boys Ranch Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Mona	Goshen Canyon Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Mona	Berstin ponds	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi/Mona	West of Airport Road	Nephi to Mona	New north/south connector road west of airport road	\$8,000,000
3	Nephi	Boys Ranch Road	Old Hwy 91 to Y in road	Reconstruct/widen/overlay existing dirt road	\$415,000
3	Nephi	County Rd North of North interchange	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	1800 North	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	1500 North	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	740 North	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	500 North	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi		Drainage Master Plan	Coordination with UDOT/Juab County/Nephi City	\$125,000
3	Nephi		Local Street / Circulation Plan	Coordination with UDOT/Juab County/Nephi City	\$100,000
3	Nephi	200 South	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	500 South	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	700 South	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	Sheep Lane	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	Airport Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	Moroni Feed Road	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	Moroni Feed Road	SR-28 to Grain Silo	Reconstruct/widen/overlay existing dirt road	\$500,000
3	Nephi	East Frontage Road	Middle Nephi interchange to north Nephi Interchange	New road connecting to existing frontage road	\$350,000
3	Nephi	200 West	50 South	Bridge over canal	\$200,000
3	Nephi	East Frontage Road	Near Salt Creek Steak House	Bridge over canal	\$200,000
3	Nephi	Airport Road	Widening	Increase roadway capacity	\$500,000
3	Nephi	Goshen Canyon Road	To power plant	Reconstruct/widen/overlay existing dirt road	\$500,000
3	Nephi	Airport Road	S-curve north of SR-132	Reconstruct	\$250,000
3	Nephi	Airport Road	S-curve south of SR-132	Reconstruct	\$250,000
3	Nephi	SR-41	New School near 1300 South/Main St.	Pedestrian access routing plan/ADA ramps/Reduced school zone	\$10,000
3	Levan	SR-28	Along SR-28 in Levan	Existing asphalt paths are falling apart / Sidewalks	\$160,000
3	Levan	SR-78	Along SR-78 in Levan	Existing asphalt paths are falling apart / Sidewalks	\$50,000
3	Mona	Interstate 15	New interchange 2-3 miles south of existing Mona interchange	Interchange	\$15,000,000
3	Nephi	SR-41	North interchange to south interchange	Reconstruction of Sidewalk, curb & gutter, street, and utilities	\$5,000,000
3	Nephi	SR-132	Railroad crossing	Improve railroad crossing	\$325,000
3	West of Nephi	SR-132	Curve west of Furner Valley slopes wrong way. Needs super elevation to assist in high speed turning.	Super elevation / safety	\$150,000
3	Nephi	SR-28	Interstate 15	Study to determine options for improving safety at the interchange (UDOT Traffic & Safety)	\$15,000
3	Nephi	Interstate 15	New interchange for industrial park near Moroni Feed	Interchange	\$15,000,000
3	Nephi	SR-132	200 West to Airport Road	Road widening with additional turn lanes	\$1,000,000
3		SR-132	Bob Garret Lane to existing passing lane	add passing lane up canyon	\$375,000
3		SR-132	Existing passing lane to summit	add passing lane up canyon	\$375,000
3		SR-132	Canyon over to Sanpete Valley	Extend existing passing lanes	\$275,000
3		Interstate 15	Rough road near mile post 227	three dips near each other causing accidents	\$750,000
3	Nephi	Interstate 15	Mile Post 226	Approach to bridges is rough causing accidents	\$250,000
3	Nephi	Interstate 15	Mile Post 225	Approach to bridges is rough causing accidents	\$250,000
3	Nephi/Levan	SR-28	Road widening Nephi to Levan	Increase roadway capacity to five lanes	\$10,000,000
3		SR-28	Nephi to Yuba Lake	Deer fence	\$750,000
3		SR-78	Railroad crossing	Improve railroad crossing	\$300,000
3	Nephi	Interstate 15	Mile Post 218 to 222	Rotomill/Overlay for rough road	\$475,000
4		Interstate 15	Mile Post 199 to Scipio	Rotomill/Overlay for rough road	\$1,300,000
3 & 4		SR-28	Road widening Levan to Salina	Increase roadway capacity to five lanes	\$45,000,000
3	Nephi	Westside Freeway	Utah County Line to Interstate 15	Continuance of Mountain View Corridor through Juab County	\$670,000,000
					\$849,350,000

5.3 Revenue Summary

5.3.1 Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Community Transportation Plan so that they understand what the City wants to do with its transportation system. UDOT can then weigh the priorities of the city against the rest of the state. It is important for East Juab County to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally coordination with UDOT's Region Director and Planning Engineer will be practical.

5.3.2 County/City Participation

The County/City will fund the local East Juab County projects. The local match component and partnering opportunities vary by the funding source.

5.4 Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects.
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (TEA-21 is the current bill; A New Federal Transportation Bill will likely be passed in late 2005).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site improvements along their site frontage and by paying development fees. Municipalities commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the County/City's spending limit. However, development fees are often a controversial issue and may or may not be an appropriate method of funding projects.